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ABSTRACT

The fourth volume in this series contains the papers presented at the Zagreb Conference on English Contrastive Projects. They are: "Recent Center Activities in Contrastive Linguistics," by William Nemser; "The Yugoslav Serbo-Croatian-English Contrastive Project So Far," by Rudolf Filipovic; "The Poznan Polish-English Contrastive Project," by Jacek Fisiak; "Two Questions of English-Hungarian Contrastive Studies," by Jozsef Hegedus; "Contrastive Linguistic Project on English and Hungarian in Hungary,: by Laszlo Dezso; "Transformational Grammar and Contrastive Analysis (A Report of the PAKS Project in Stuttgart)," by Ekkehard Konig; "Generative and Taxonomic Procedures in Contrastive Analysis," by Vladimir Ivir; "A Model for Second Language Acquisition," by Dumitru Chitoran; "Psycholinguistics and Contrastive Studies," and "The Romanian-English Language Project," both by Tatiana Slama-Cazacu. All except two of the papers are followed by discussion. (CLK)

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ZAGREB CONFERENCE ON ENGLISH CONTRASTIVE PROJECTS

7—9 December 1970.

Papers and Discussion

Edited by:
RUDOLF FILIPOVIĆ

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ZAGREB, 1971
INSTITUTE OF LINGUISTICS
Faculty of Philosophy, University of Zagreb
Zagreb, Yugoslavia

B. STUDIES

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ZAGREB CONFERENCE ON ENGLISH CONTRASTIVE PROJECTS
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PREFACE

Contrastive grammar projects working between English and other languages have proved to be most worthwhile. Besides the Yugoslav Serbo-Croatian - English Contrastive Project, which is now in its third year, we are happy to see so many other projects working in the same field and with the same goals, though on different material.

As the organizer of the 10th International Congress of FIPLV (Zagreb, 1968) I took advantage of the opportunity to introduce a new section (Section 6) covering Contrastive Linguistics and Foreign Language Teaching. Representatives of three contrastive analysis projects (the Mainz project, the Polish project and PAKS in Stuttgart) gave reports on their work: Professor Broder Carstensen spoke about Contrastive Syntax and Semantics of English and German, Professor Jacek Fisiak on Contrastive Studies in the Phonology of English and Polish, and Professor Gerhard Nickel on the Project on Applied Contrastive Linguistics (PAKS). This was a good chance to establish contact with these projects and exchange experience.

At the Second International Congress of Applied Linguistics held in Cambridge 8 - 12 September 1969, several papers dealing with problems of contrastive work were read in the Section on Contrastive Linguistics and new contacts were established. In the discussion that followed my paper on the Yugoslav Serbo-Croatian - English Contrastive Project, several questions common to contrastive projects were raised and discussed. It was already there that I suggested that closer cooperation and contacts should be established among contrastive projects. Since the problems that arise in working on our projects are similar in nature, it would seem advantageous for representatives of all contrastive projects that have English as a target language to meet

once a year to report on results attained and current work.

So we decided to organize the first such meeting in Zagreb on December 7, 8, and 9, 1970, and invited six projects to send their representatives to read papers on their projects and present papers on specific topics connected with their projects. In this way we hoped to broaden our contacts with the three projects mentioned (two from West Germany and one from Poland) and get in touch with new English-Romanian, English-Hungarian, English-Czech and perhaps other projects.

We also invited the representative of the Center for Applied Linguistics in Washington, D.C., Dr. William Nemser, to report about the Center's Activities in Contrastive Linguistics.

The Mainz project and the English-Czech one could not send their representatives, so only five projects were represented: the German (PAKS), the Hungarian, the Polish, the Romanian and the Yugoslav contrastive project.

There were six reports about the respective projects and four papers about specific topics connected with our work. The Conference was attended by about 50 people from Germany, Hungary, Poland, Romania, the USA, and Yugoslavia.

Rudolf Filipović

Institute of Linguistics, Zagreb University, 1971

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WELCOMING SPEECH

In opening the Zagreb Conference of English Contrastive Projects, I am happy to welcome all our fellow members of projects and all our guests to the Conference.

The idea of contrastive studies has a certain modest tradition at this faculty, making it perhaps logical that the first conference of this type should be held here. (I say the first, because I hope it will be followed by many others, larger and better organized.) The Institute of Linguistics of the Faculty of Philosophy, Zagreb University, in fact began work on the contrastive analysis of Serbo-Croatian and English some years before the actual start of the Yugoslav Serbo-Croatian - English Project. My first visit to the United States, in the autumn of 1964, brought me into contact with the Center for Applied Linguistics. One afternoon, in conversation with the Center's then Director, Prof. Charles A. Ferguson, and his co-workers, the idea arose that we too could start a contrastive project, in which English would be the target language rather than the source language. At the time there were no prospects for the sort of organized project we have now; but my newly-conceived idea began to grow and take shape when in the following month I met the authors of the first Contrastive Study Series monographs: Prof. William Moulton, author of The Sounds of English and German, and Prof. Herbert Kufner, who wrote The Grammatical Structures of English and German.

That same school year we started work at the Institute of Linguistics here with a small group of linguists and English scholars. We began to acquaint ourselves with the existing literature, as much of it as we were able to come by. These were modest beginnings, without any very visible results, but the work did not go unnoticed. When Prof. Robert Austerlitz

from Columbia University visited Zagreb, his recommendation led, the following year, to my being called upon by the Yugoslav Federal Commission for Cultural Relations to organize contrastive work on English throughout Yugoslavia, with a view toward applying for financial support from the Ford Foundation and State Department funds. In these preparatory years, with the help of colleagues in Yugoslavia and the United States, I finally succeeded in gaining a status for the project that would allow it to live and work on the level that you see today. I would like to take this opportunity to express once more our gratitude to all those whose help was so valuable, I would even say decisive, for the beginning of our project's life. In particular, to the President of the Federal Commission for Cultural Relations with Foreign Countries, Dr. Dušan Vejnović, and to Dr. Ljubivoje Aćimović on the Yugoslav side, and Mr. Stanley Gordon on the American side. Though not specialists in our field, they saw from the beginning the value of working on such a project, and gave us their support in the days when it seemed the idea of Yugoslav-American collaboration on a contrastive project would never come to fruition.

In the second phase, the actual beginnings of work on the projects, we received most valuable cooperation from the C.A.L. and abundant help from its director, Prof. John Lotz, and the director of its Foreign Language Program, Dr. William Nemser. They took our new-born project, still shaky on its legs, and did everything they could to give it the strength to live. Their cooperation and that of Yugoslav colleagues helped it through the dangerous first year, organizationally and financially as well as purely scientifically. To them, as well as to all the colleagues, present and absent, who have helped us in our work - our sincere thanks.

With this experience behind us, it was with great interest and joy that we greeted the news that other projects were being organized along lines similar to ours - first the one in Romania, and then in Hungary and Czechoslovakia. When, at the Zagreb Congress of the Fédération Internationale des Professeurs de Langues Vivantes (FIPLV) in 1968, we established contact with the two projects in West Germany, Prof. Nickel's PAKS and Prof. Carstensen's in Mainz, and with the Polish project in Poznań, we began to feel stronger, surer of ourselves, as one of the members of a European family of English contrastive projects. And so we felt the need for closer ties with our sister projects, as we have continuously emphasized, and called for publicly at the AILA (Association Internationale de Linguistique Appliquée) conference in Cambridge in 1969.

With these thoughts and wishes in mind, we began to organize this conference of ours by sending a circular letter to all projects and individuals that we knew were interested in contrastive analysis between other languages and English. We proposed that representatives of all projects should meet once a year to report on results attained and current work, and to discuss problems coming up in our work.

The Yugoslav project is happy to have the chance to organize this first conference. Its wish is that the conference will set up close ties with everyone working on contrastive studies, whether present today or not. We hope that we can be in closer and closer touch; that we can take advantage of one another's results; that we can consult together more often. Let us regularly share the results of our work, keep each other informed, and not allow one project to wrestle with problems that another has already solved. By exchanging publications and internal reports, we can all provide new ideas and solutions which other projects may not have come to yet. Our co-operation with PAKS

can help complete the bibliography of contrastive studies that PAKS has been so successfully compiling.

With these wishes I declare this conference open.

Rudolf Filipović

William Nemser (Washington, D.C., USA)

RECENT CENTER ACTIVITIES IN CONTRASTIVE LINGUISTICS

Introduction

The activities of the Center for Applied Linguistics in the field of contrastive linguistics, which extend throughout the eleven years of the Center's existence, have recently been chronicled in an article in the Linguistic Reporter (19) with which some conference participants are probably already familiar, and which is readily accessible to the rest. Moreover, certain major on-going activities in which we are currently involved, including the Yugoslav Serbo-Croatian - English Contrastive Project and the Romanian-English Language Project, are the subject of special reports at this conference. Therefore, I need refer here only very briefly to activities covered either in the Reporter article or in these special reports, perhaps adding a few technical asides, and can concentrate principally on various other projects in which the Center has been or may be involved.

The survey will be undertaken from a point of view which I hope is not wholly idiosyncratic regarding the nature of the discipline of contrastive linguistics, and regarding the nature of the evolution of the field over the past twenty-five years or so (taking Weinreich's [49, 50] and Haugen's [34 - 39] theoretical writings of the fifties, and the practical formulations of Fries [32] and Lado [41] as the seminal works of the era in question). In any case, it should be made explicit. I take contrastive linguistics to be a field concerned with "drawing the implications, in terms of learning facilitation and inhibition, of

structural similarities and differences between the language or languages a learner has already acquired and the language he is seeking to acquire. On the basis of a comparison of the descriptions of the phonologies, grammars and lexicons of the languages in question, as formulated in accordance with the contrastivist's preferred model of language structure, contrastive linguistics offers hypotheses concerning identifications a learner will make between elements of his base and target systems, thus providing predictions and explanations concerning his learning behavior of presumed high value in planning learning and teaching strategy" (20:2-3). In light of these preoccupations, as is not always recognized, contrastive linguistics differs radically in its objectives - and therefore in its procedures - from the fields of language typology, translation theory, and transfer grammar although it may share certain concepts and techniques with them. So much for this view of the aims of the field; now as to its evolution.

When it turned out that realization of these objectives was a far more subtle task than had been supposed, and that the theoretical bases and procedural practices of the field fell far short of the requisite levels both in predicting and explaining the behavior of language learners and in triggering the promised revolution in language teaching, disenchantment was widespread among both language teachers and linguists. One prominent linguist-language teacher at a recent national conference even seemed to suggest a moratorium on activities in the field (48), and disparaging references to contrastive linguistics as passé or unworthy of serious attention are common. The up-coming international conference in Hawaii has been described by an organizer in all seriousness as a final assessment of the relevance of the field.

Other linguists, however, presumably including the participants at this conference, were neither surprised nor discouraged to find that the mechanical methodological practices and simplistic theoretical principles traditional in contrastive linguistics have proved inadequate to the task of specifying so complex a phenomenon as language acquisition. Instead they have accepted the implicit challenge to revitalize the field by reformulating these principles and introducing imaginative new procedural approaches. (Certain of these developments are illustrated in reports presented at this conference.) These researchers retain the assumption - hardly debatable - that structural similarities and disparities between the language or languages one knows and a language one is seeking to learn will significantly determine the mode of learning. But they are far less ready than were their predecessors to assume the exclusive significance of this determination, or to take for granted either the definitiveness or the psychological relevance of the particular model of language they employ in their analysis. A static view of language learning, exemplified by exclusive reliance on the basic analytic technique of comparing abstract descriptions of the base and target systems, is yielding to a more dynamic concept concentrating on the learner himself in the process of language acquisition (43). For some linguists at least, with the base and target systems, the "approximative" systems a learner employs during the process of language learning before mastery of the target system (18) now assume significant roles in the constellation of language systems involved in this process. Concurrently, an interest is developing in learning universals - identities among approximative systems, if you will - and even between the approximative systems employed by foreign language learners and the remarkably similar language types used by children, the internal structuring of which Einar Haugen emphasized years ago, and which he has denominated "intermediate systems" (35, private communication). He also applies this term to

the "bilingual dialects" of certain immigrant groups in the United States, resulting from the "learning process in reverse" which often complements language learning: "as the learner builds new systems in the language he acquires, he dismantles and reorders the systems of the language he already knows" (40:49).[1] The sequence of approximative systems of a foreign language learner can also be related to the stages in the acquisition of linguistic borrowings, as described, for example, by Haugen (38:39-68) and Filipović (31) - a process of communal language learning characterized, however, by increasing interference by relation to the norms of the "target" (i.e. donor) language, and decreasing interference by relation to the "base" (i.e. recipient) language. A recent imaginative suggestion by László Dezső even seeks a relationship between the typological constraints holding between stages of a language in historical development, the "diachronic universals" to which Greenberg refers (33), and those constraints within sequences of approximative systems in language learning (private communication). Some of these ideas were doubtless stimulated by a current view, vigorously propagated by Chomsky, Halle and others, that children, and presumably, to some extent at least, foreign language learners as well, bring to the language learning task an essentially complete innate linguistic competence - a language structure. Learning in this view consists principally in adapting this structure, in relatively superficial ways, to the accidental demands of the cultural context. Whether one accepts this currently popular view or another, notably advanced by Professor Slama-Cazacu, which stresses instead an innate competence for language acquisition as part of a more general human cognitive capacity - as reflected, for instance, in the "learner strategies" described and illustrated in work by Corder (29), Dušková (30), Strevens (46) and Richards (44), it is clear that contrastivists must admit still other major linguistic factors among the non-contrastive (or non-modelled) determinants of learner behavior. In short, in my

view at least, the evolution of the field of contrastive linguistics over the past twenty-five years has made it obvious that its traditional domain must be greatly extended if we are to attain an understanding of language learning or even of the role of contrastive factors.

Earlier reported activities

As we are all aware, two complementary approaches have been employed in research in contrastive linguistics: contrastive analysis (or "parallel description," "differential description," "dialinguistic analysis," or even "analytic confrontation"), a deductive procedure which predicts learning characteristics on the basis of a comparison of language descriptions - i.e. the application of the principles of contrastive linguistics; and error analysis, which operates in the reverse direction seeking to explain the data of learner behavior in terms of these principles - i.e. the validation of these principles. Presumably, the creation of a unified theory of contrastive linguistics would be signaled by a junction of these approaches, with contrastive analysis predicting the data accurately and the data implying the theory. One reason this union remains in the indefinite future is the frequent confusion of these procedures, with the theory often selectively applied in terms of pre-observed data, and the data selectively viewed in terms of the theory. These are occupational temptations to which I am afraid even Center linguists have occasionally succumbed.

The Center's traditional involvement in the field of contrastive linguistics, reflecting the professional interests of the former Director, Charles A. Ferguson, the present Director, John Lotz, and various staff members, has included participation in projects of both types - error analyses and contrastive analyses. The Center's role in these projects has been varied, ranging from the formulation and administration of research projects to direct participation in the research itself, to

the publication of research results. Major support has come from the Ford Foundation, the U.S. Office of Education, the U.S. Department of State, the U.S. Bureau of Indian Affairs, and, in the case of the East Central European projects, from European governmental sources as well.

In 1960, the Center published an error analysis by Nancy Kennedy (12) identifying and diagnosing problems encountered by American English speakers attempting to acquire the phonological system of Egyptian Arabic (Problems of Americans in Mastering the Pronunciation of Egyptian Arabic). Her data on interference patterns and other learning characteristics is based both on her own experiences as a student and on the observation of classes. While in this valuable study she succeeds in relating many learning problems to specific structural disparities between American English and Egyptain Arabic, the complexities of the data often elude such explanations: for example, the fact that equally unfamiliar sounds often posed unequal learning tasks (the case with the voiced and voiceless pharyngeals, as one instance); or the occurrence of one rather than another equally predictable interference pattern; or the fact that Arabic informants often regard equally deviant renditions of Arabic sounds as unequally unacceptable. However, the study offers considerable documented data of theoretical interest on problems and error types, and its practical utility is obvious.

A contrastive study by Daniel Cárdenas (5), published by the Center the same year as the Kennedy study, was intended to serve as an aid to teachers of Spanish to English learners. The general usefulness of the work is evident as regards preparing teachers for problems likely to be encountered and, by indicating the possible origins of these problems, suggesting remedial procedures. At the same time, viewing the kind of data which Miss Kennedy collected in her error analysis in terms of

the type of contrastive analysis Cárdenas employed (the fact that the target languages in the two studies are different is irrelevant) clearly shows the limitations on the extent to which the actual learning situation can be accounted for in terms of the predictions and the explanations offered by the typical contrastive analysis. The basic analytic technique consists in simply projecting the base language categories or structures on those of the target language, in accordance with often questionable or unspecified typological criteria, and implies that the range of possibilities open to the learner is a two-way choice between the two systems. Thus we are unprepared to find in Miss Kennedy's data evidence that, for example, American learners of Arabic at one persistent stage in the learning process often establish an ad hoc phonemic opposition based on a feature - strong laryngeal friction - found in neither Arabic nor English.

Perhaps the major early effort in the field of contrastive linguistics, in a day before such large-scale projects as those in Yugoslavia, West Germany and Romania, was the Center's Contrastive Structure Series of 1962 to 1965, edited by Charles Ferguson and aimed at facilitating the teaching of the five languages most widely taught in the United States. Published volumes relate the sound system and the grammar of English to those of German (17, 13), Spanish (25, 26), Italian (1, 2). Unpublished volumes on French (14, 15) and Russian (8, 9) are available through the Educational Resources Information Center (ERIC) at the Modern Language Association in New York. The phonology volumes sought exhaustiveness, although specific predictions of interference patterns were often lacking, and documented validations rare. The grammatical volumes were, in general, circularly selective with the predictions pre-checked impressionistically through classroom experience. Even so, they seldom drew specific implications from cited differences and similarities. Widely-discussed features of the Spanish studies are the "hierarchies

of [learning] difficulty" which the authors attempt to establish. Stockwell has recently stated that the scales are based on classroom experience, not - as is readily interpretable from the texts - on learning theory. This experience obviously differs markedly from that of at least one reviewer, Dwight Bolinger (28). The phonological scale poses certain problems in the application. It is based on a comparison of selection options in the two languages in contact, and ranges at the low end from coinciding obligatory choices in the two languages (both Spanish and English require a vowel in the context /sw_/) to, at the high end, obligatory choice in the target system and "zero choice" in the base system (a bilabial fricative is a contextually determined allophone of Spanish but does not occur in English). However, one result of treating allophones, phonemes, and even phoneme classes (vowels) as units on the same level is ambiguous readings on the scale. The English phoneme /t/, for example, is obligatory in the contexts /lts_#/, /nč_#/, /mps_#/ and others, but optional in these contexts as well since its aspirated and non-aspirated allophones are in free variation there. Thus for the Spanish learner of English mastering the English sound in these unfamiliar contexts, the scale would ambiguously predict both serious and less serious difficulties.

To balance criticism of the Contrastive Structure Series, based on five to ten years of hindsight, it is clear that the work in toto represents a milestone in the history of contrastive linguistics that retains unquestionable value for the insights furnished on the task awaiting the English learner of any of the five languages treated. Along with its descriptive material, the Stockwell-Bowen study offers an appendix on the teaching of pronunciation, while Moulton itemizes twelve principal points of conflict between English and German with "corrective drills" for each. Sections of the grammatical volume on Spanish represent perhaps the earliest attempt to utilize the transformational-generative

approach in contrastive studies.

I will here merely mention the Gage (7) and Hammer-Rice (11) bibliographies, published in 1961 and in 1965, which Rudolf Thiem (47) is updating within the framework of the Project on Applied Contrastive Linguistics (PAKS) in West Germany, and the brief contrastive sketches in the volumes on Bengali (24), Swahili (23) and Vietnamese (10). No contrastive section was included in the Arabic volume (4) in light of the diversity among the subsumed dialects (a circumstance to which we will revert below).

We should pause briefly over the set of studies (21) published in 1969 designed to teach English to elementary school children who are native speakers of the American Indian languages Choctaw, Navajo and Papago. These studies, by Nicklas (Choctaw), Pedtke - of the Center staff - and Werner (Navajo), and Mathiot and Ohannessian (Papago), were edited by Ohannessian and Gage - also Center staff members. The earlier Contrastive Structure Series had specifically sought communication with the practical language teacher and course developer rather than the linguist-specialist. In the phonology volumes considerable attention is devoted to the basic facts of articulatory phonetics and structural phonology, and the Stockwell-Bowen study even includes a glossary of linguistics. Nevertheless, the Series was regarded as only partially successful at attaining this objective of bridging the communication gap between linguist and language teacher. Thus Ohannessian, Gage and their collaborators made special and, I think, successful efforts in this direction: the presentation is conscientiously non-technical, numerous recommendations on pedagogical procedures are included, and teachers are warned to check all predictions of learning difficulty and facilitation through observation in the classroom. The Navajo study offers numerous examples of characteristic error types including such constructions as Did John combed his hair?, as

well as What Joe is doing?, and What did she brought you?, none of which, by the way, are apparently modelled literally on Navajo constructions and all of which probably sound familiar to most teachers of English as a foreign language.

To conclude this brief review of Center activities already reported elsewhere, I will only mention the East Central European contrastive projects in which we are involved in both an administrative and consultative capacity. All have as one of their objectives to produce a contrastive study facilitating the teaching of both English to speakers of the languages in question and the teaching of these languages to native speakers of English. A second objective is to further the professional development of younger scholars, both American and European, through participation in a research project under the guidance of senior specialists. The on-going Romanian and Yugoslav projects are the subject of special conference reports. Prospects for the inauguration of similar projects in Hungary and Poland early in 1971 appear excellent. A Czechoslovak project is also under consideration, as is the joint publication by the Center and a scholarly institution in Czechoslovakia of Vilém Mathesius' early contrastive study of Czech and English (42), Nebojte se angličtiny!, with an introduction by Josef Vachek.

Other activities, past, on-going and pending

Among the contrastive research of the Center not discussed in the Linguistic Reporter article was that associated with the Center's Urban Language Study and its Sociolinguistics Program. Linguists at the Center over the past five years, with the valuable help at one period of three Scandinavian scholars, Ulf Hannerz, Bengt Loman, and Baumann Larsen, have undertaken to describe the non-standard speech of the Black community of Washington, D.C. and certain other urban centers, a social dialect differing very markedly from the standard speech of these regions. Systematic comparison of the non-standard

and standard varieties formed the basis for teaching materials which have been successfully tested in the Washington school system and elsewhere. The aim, it should be stressed, is not to eliminate non-standard Black English, but to provide Black children with a command of standard English for use under appropriate conditions, most particularly in their contact with the socially and economically dominant community of standard speakers. One product of the study is the language program English Now (6), by Irwin Feigenbaum of the Center staff, including texts, workbooks and casette tape components, which is based on careful contrastive comparison of the two speech varieties in question. Exercises include discrimination drills (class~clasp; My sister like the zoo ~ My sister likes the zoo; The man car ~ The man's car); conversion drills (They always broadcast the baseball scores → He always broadcasts the baseball scores [not He always broadcast...]; Yes, he is → No, he is not [not No, he not or No, he ain't]); and translation exercises (Walter my best friend → Walter's my best friend; fourteen cent → fourteen cents; No, she ain't → No, she isn't) and so on.

A related Center publication is the volume Teaching Black Children to Read, edited by Joan Baratz and Roger Shuy (3). Of particular interest in light of earlier references to the role of approximative systems in foreign language acquisition is an included study by William Stewart, "The Use of Negro Dialect in the Teaching of Reading," in which he suggests, as a possible teaching strategy for non-standard learners of standard English, making the transition from Black English to standard English "in a series of stages, each of which would concentrate on a limited set of linguistic differences" (3:184). This approach would combine oral language teaching and the teaching of reading. Stewart illustrates a three-stage transition process (3:185-6) with the dialect sentence Charles and Michael, they out playing (Stage 1), the intermediate utterance Charles and Michael,

they are out playing (Stage 2), and the standard sentence Charles and Michael are out playing (Stage 3). The actual program would probably require more intermediate stages.

Current sociolinguistic research at the Center includes a study considering an interesting contrastive problem in "overlapping" interference. Under the leadership of Walter Wolfram, linguists are currently investigating the extent of influence during the acquisition of English by second-generation Puerto Rican residents of the Harlem district of New York City - as you may know, a predominantly Black community - of, on the one hand, the non-standard Negro speech of their Negro peers and, on the other, of the Puerto Rican Spanish of their fellow Puerto Ricans. Results of theoretical interest will include information on the sociolinguistic dimensions of minority groups in contact, and on the extent to which interference problems in the acquisition of a foreign language are common to speakers of a given base language and the extent to which they are indigenous to the particular social setting in which the target language is acquired. One practical result will be an estimate of the usefulness of English materials, such as those Feigenbaum developed for speakers of non-standard Black English, for the teaching of English to Puerto Ricans living in close proximity to such speakers.

The Center is preparing a project representing an interesting new departure in the field of contrastive linguistics: a study contrasting the sign language employed by the deaf community in the United States, a fully developed linguistic system in its own right, with standard English. The research also aims at description of the varieties of English actually used by deaf learners of English - the approximative systems associated with learning stages. Procedures will include the selection of an appropriate corpus of written English for translation

into sign language as a means of establishing relevant structural correspondences between the systems, and an error analysis of an extensive corpus of the written English of teen-aged pre-college deaf students. The results of the research should make possible the preparation of improved materials for the teaching of English to the deaf, and should further increase the capabilities of classroom teachers by furnishing them with a knowledge of the language of their students, enabling them not only to minimize the negative transfer (or interference) from sign language but to maximize positive transfer, building on language skills, often unacknowledged, which their students already possess. The principal investigator on the project staff, William Stokoe, earlier published a state-of-the art paper in the ERIC system at the Center, The Study of Sign Language (27), which contains a brief contrastive analysis of the syntactic components of English and sign language. Interesting observations include the correspondence between the role of emphatic stress in English sentences like He saw me!, He saw me., and He saw me? and head and eye movements as well as modifications of basic hand movements in sign language; and the absence of article and copula in the sign language equivalent of a sentence like There's a man in there, but its equal structural complexity, both in terms of the organization of the signs (i.e. morphemes) themselves, and that of their constitutent elements: the tabs - the beginning-points and end-points of the sign gesture, the dez's (from "designators") - the shape of the hand or hands making the sign gesture, and the sigs - the gestures themselves.

Two other projects, which can be discussed very briefly since they remain in the "seedling" stage, would have special interest as attempts to contrast a more-or-less unitary language variety - standard American English - with a group of closely related languages or language

varieties. (This would, of course, not represent the first attempt at such a study since the Yugoslav project is already successfully coping with the problem of variation on both the base-language end - Serbo-Croatian - and the target-language end - British and American English - although problems associated with non-standardized language varieties did not arise.) The notion of a contrastive study involving a dialect- or language-cluster arises partly from practical considerations: even meeting the need for studies contrasting major languages with each other is not feasible. The first such study under consideration involves English and a group of closely-related Bantu languages of Southern Africa - the Sotho group including Tswana, Southern Sotho, Northern Sotho and Lozi. (For some of these languages the Center has recently developed teaching materials for use by Peace Corps Volunteers.) The second project would relate English and the major dialects of Arabic, including those of Egypt, Lebanon, Syria, Tunisia, and so on. In both cases the analysis would presumably aim at abstracting a common structural core from the cluster of language varieties in question, and would then treat features specific to each variety in a separate appendix. The analytic format developed would hopefully have wide application in similar situations elsewhere.

Finally, I invite your participation in two other Center activities relevant to contrastive linguistics. The first is the new rapid dissemination service, Studies in Contrastive Linguistics, which promptly reproduces, in the form of microfiche or hard copy, the latest research results in the field. Selections from John Lotz's forthcoming Contrastive Papers (16) are among the significant works to be made available in the near future. The various projects represented here can both profitably exploit this service to keep abreast of latest development, and, by

submitting the results of their own research, assure all interested scholars of the same opportunity.

The other activity is the compilation of an annotated selective bibliography on contrastive linguistics by Dian Overbey of the Center staff. It was felt that some guidance through the large, growing, and by no means uniformly pertinent literature, as presented in the Hammer-Rice and Thiem bibliographies, would be valuable, particularly for those scholars newly introduced to the field - the case with many researchers in current projects. A preliminary draft of the bibliography has been prepared (22). (Copies will be available here or will be forwarded upon request.) We would be very grateful for your comments, including recommendations regarding additions or even deletions.[2]

NOTES

1. As a generic term, "approximative system" seems preferable to "intermediate system" or "interlanguage" (45) on the one hand, and "transitory system" on the other, since in the case of child language there is no base language - unless one accepts the notion of innate structure (see below) - and since the system of foreign language learners who have reached a "learning plateau" is apparently often stable.

2. Dr. Nemser was unfortunately not able to be present to read his paper.

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THE YUGOSLAV SERBO-CROATIAN - ENGLISH CONTRASTIVE PROJECT SO FAR

1. Introduction. Interference is a well-known result of any type of language contact. On the basis of contrastive analysis, the Yugoslav Serbo-Croatian - English Contrastive Project[1] seeks to define areas of interference in the language-teaching situation, and to use the results in planning improved teaching materials and methods.[2] Detailed contrastive analysis should do much to advance both English teaching in Yugoslavia and Serbo-Croatian teaching in the United States and Britain, since insufficient attention has been paid so far to the difficulties that arise from linguistic interference in teaching either language on the territory of the other.

Our Project regards contrastive analysis as having two main values: pedagogic and general-linguistic. The pedagogic value[3] should come out a) in new foundations for foreign language teaching materials, b) in the organization of the materials, i.e. the order in which individual items are taken up in teaching, and c) in the organization of the classes themselves, i.e. the amount of time to be devoted to introducing and reviewing various points.

The general-linguistic value[4] of contrastive analysis can be brought out more clearly by considering how this subdiscipline differs from comparative linguistics and what its role is in linguistic description. Comparative linguistics seeks to determine genetic relationship between languages, whatever their present state; contrastive linguistics considers corresponding and conflicting

features of two (or more) languages, whether these languages are genetically related or not.[5]

The systematic analysis of a language for contrastive purposes must be carried out on a synchronic basis. When we have two synchronic descriptions, using the same meta-language, we can apply contrastive analysis, confronting the two systems in order to see more clearly phenomena that may have escaped us in working on one system at a time. Thus a contrastive study contributes to a better and more complete description of both individual languages.[6]

2. Methodology. The question of the method to be used was discussed at the first Project workers' seminar, held April 1 - 2, 1967, in Zagreb. Most of the reports touched directly or indirectly on this question. In my introductory lecture, "Contrastive Analysis of Serbo-Croatian and English", trying to set out the preliminary theoretical and methodological considerations for the design of such a project, I dealt with the Problem and Objectives, the plan of research and methodology and the organization of the project.[7] In his paper "Basic Problems of Method in our Work", Prof. Pavle Ivić cited three possible approaches: 1) traditional, 2) structuralist, 3) generative. E. Wayles Browne, in his paper "On the Transformational Method in General, and Some Results in Contrastive Studies", and Prof. Owen Thomas in "An Example of Transformational Analysis", stressed the applicability of transformational-generative grammar. In "An Example of Contrastive Study", Prof. Leonardo Spalatin gave an illustration of a possible translation approach. Prof. Željko Bujas spoke on "The Applicability of Data-Processing Machines in Our Work". A project like ours will need thousands of examples, and mechanical aids can be of great service.

The goal of contrastive linguistics is a contrastive grammar of the languages under study. Such a grammar represents something new in

linguistics, and also meets a long-felt practical need. The results of research on a contrastive grammar may be significant enough to represent a contribution to linguistic theory and not just to linguistic practice (applied linguistics).

What linguistic theory, what model, should a contrastive analysis be built on? Contrastive analysts must decide whether they can adopt some presently existing theory or construct a new one, as well as formulating the method to be used in the analysis.

Although a good number of contrastive studies and analyses have been written, still we cannot say that any specific method exists intended or constructed for contrastive analysis. The monographs so far published in the Center for Applied Linguistics Contrastive Structure Series[8] confirm this point. While the English - German[9] and English - Italian[10] studies were done with older, more taxonomic approaches, the English - Spanish contrastive analysis[11] was carried out on the basis of Chomskyan theories. The authors of this last use the transformational-generative approach wherever it is appropriate, more in the second monograph, devoted to the grammatical structures of Spanish and English, than in the first, which treats the phonologies more in the spirit of classical American structuralism.

This English - Spanish contrastive analysis has been described as "an excellent pioneering work - the best, and perhaps the only, real contrastive grammar of this /T-G/ type so far".[12] Yet shortcomings can be observed which are the result of applying a method not yet worked out to the end.

I have pointed out[13] the difficulties which would arise from employing exclusively one theory or method which was not completely developed or adapted for contrastive work.

Linguistic theory furnishes various possible starting points for analysis. The basic unit can be the word, the clause, the sentence, or the paragraph (discourse). Each linguistic school has its own preferences. One starting point will have advantages over another, depending on the model chosen. If the clause level is chosen for analysis, then the tagmemic approach is said to be most advantageous; on the sentence level the transformational-generative model turns out to be the most applicable; on the discourse level - the stratificational model.[14]

Various articles[15] have appeared attempting to show that one or another existing procedure is applicable. Some writers have worked with a limited corpus in order to show how the translation method can be applied.

E.A. Levenston uses "The Translation-Paradigm" as his "Technique for Contrastive Syntax".[16] He gives examples of three of the ranks of Halliday's theory:[17] clause, group, word. In his translation method, one grammatical category of language A is confronted with all the categories of language B that it can be translated by.

H. W. Kirkwood in his article "Translation as a Basis for Contrastive Linguistic Analysis",[18] on the basis of a comparison of English and German structures on the syntactic and semantic levels, concludes that translation-based contrastive syntactic and semantic study gives a firm empirical foundation to build conscious control of the structure of a language on.

L. Spalatin, "Contrastive Methods",[19] sketches the application of the so-called back-translation (two-way translation) method, using as an illustration the English possessive pronouns and their Serbo-Croatian translation equivalents. The article points out the advantages which this strictly circumscribed method provides, since it can be applied as well to languages not having the same categories.

Ž. Bujas, "Concordancing as a Method in Contrastive Analysis",[20] stresses that in a contrastive analysis based on a large corpus, the corpus must be processed by computer. Concordances for both languages will assist in contrasting the original and translated text material. The article cites several ways to use the concordance method, illustrating its wide applicability in syntax, morphology, word-formation, and lexicon.

R. L. Allen[21] and his students have used Allen's own sector analysis in contrastive studies, particularly of sentence structure, with pedagogical applications in mind.

The work of authors using the transformational-generative approach in contrastive analysis is highly interesting. Stockwell establishes some principles for such analysis in his unpublished thesis "Contrastive Analysis of English and Tagalog", as well as taking part in the above-mentioned English - Spanish study. W. O. Dingwall in his article "Transformational Generative Grammar and Contrastive Analysis"[22] gives a detailed sketch of possible applications of this approach.

The conclusion[23] I have drawn from the literature and from our experience[24] is that in contrastive analysis there is a strong interdependence of theory and practice, so that the best method will be one combining the theoretical and the empirical. Our results so far have shown that in certain areas no present theory can offer a usable method. This has led us to prefer a method or combination of methods directed towards practical results as well as towards a possible advancement in linguistics. These practical results must be applicable in compiling teaching materials and working out improved teaching methods; this will only be possible if the results are set forth in a manner comprehensible to the average reader of the Project's publications.

To insure wide coverage of the linguistic phenomena involved, and to make up for the lack of linguistic theory in some areas, we have adopted the translation method, based on a corpus of examples. This decision still does not answer the question of which approach we will use to the linguistic material - traditional, structural, or generative. Prof. Pavle Ivić convincingly shows in his paper for the Project ("A Few Words on Problems of Method"[25]) that the first approach is untenable because of its lack of coherence and unsuitability for contrastive work. While because of our progressive scientific outlook, Prof. Ivić continues, we would like to adopt the most modern approach, the generative, the situation locally forces us to compromise, to "infuse classical structuralism with the elements of the generative approach".

At the third Project seminar in Belgrade (November 16 - 17, 1968), discussing how to work on individual topics, we concluded that the analysts could use any approach that would enable them to reach the results desired. This, however, goes only for the stage of analytical work on separate topics. Later, in the synthesis stage, when the final monograph is being written, we have agreed that the generative-structural compromise will be in force.

3. Corpus. The adoption of the translation method leads naturally to the question of the corpus.

At first we laid down specific principles for the construction of the corpus. We intended to include both British and American authors, non-fiction and fiction, along with Serbo-Croatian translations; similarly, the Serbo-Croatian to English part would include writers representing the different variants of the literary language, with English translations made by Englishmen and Americans. It soon became

quite clear,[26] however, that it would be rather difficult, if not impossible, to build a large enough corpus within the limited time and with the resources that we had at our disposal, and that consequently we would have to use an existing corpus[27] and a computer and other data-processing devices. There are, at present, two large corpora: one built on British material, spoken and written, A Survey of English Usage,[28] compiled under the leadership of Prof. Randolph Quirk (University College, London), and another one built on American material, solely written, the Brown Corpus (short for the Standard Sample of Present-Day Edited American English[29]) selected and prepared for computer processing by W. N. Francis and Henry Kučera of Brown University.

By its composition and size the former corpus would meet the requirements of our Project. Two main reasons have prevented us from choosing it: a) Prof. Quirk's corpus is not readily accessible since it does not exist in printed form; b) it is not designed for computer processing. The Brown Corpus, on the other hand, is available on computer tape. Although it does not cover the spoken language, its range of styles is almost equal to that of the Quirk Corpus.

The Brown Corpus consists of 1,014,294 words of edited American English prose extracted from works published in 1961. It is made up of 500 samples of about 2,000 words each, beginning and ending at sentence breaks. The samples break down as follows: informative prose, 374 samples, and imaginative prose, 126 samples. Clearly, this distribution gives a broader picture, and we hope a more accurate one, than the purely literary sources grammarians have traditionally restricted their observations to. And even within the imaginative prose category there are various sorts of widely read material which have hitherto attracted little scientific attention, such as love stories,

westerns, detective stories, and science fiction.

The entire text of the Brown Corpus has been obtained in orthographic form by running the tape through the computer. For technical and financial reasons we have shortened the Brown Corpus by half. After reduction by one-half, with emphasis given to dialogues and letters to the editor (as these two categories seem to come closest to the free style of expression that we need most in our corpus), the Corpus has been translated into Serbo-Croatian by translators selected to represent the three major regional variants of Serbo-Croatian (western, central and eastern). It is thus hoped that the translation into Serbo-Croatian will display the greatest possible number of features of all variants.

It was clear to us from the beginning that a complete contrastive analysis of the two languages (Serbo-Croatian and English) would require two corpora of equal size and composition, each to be translated into the other language. This would enable us to examine phenomena in both languages from the point of view of their translation. This idea had to be given up, however, for several reasons, and we eventually decided to work with only one major corpus and its Serbo-Croatian translation. So our complete corpus consists of twice 500,000 words (the Brown corpus with its Serbo-Croatian translation), a total of some 1,000,000 words of running text.

This material is being processed by the Zagreb Municipal Computer Center's IBM 360 computer to give us "contrastive" concordances, in which, for each language separately, desired words will be picked out, together with their sentential context and the corresponding passage from the version in the other language.[30]

4. The Coding System. In order to be able to retrieve all morphological and syntactic elements that might be of interest to

project workers when working on their topics, a numerical coding system was introduced that corresponds to a coarse breakdown into part-of-speech categories and grammatical functions, and the corpus material was coded according to this system.[31] In principle, every word was assigned a code according to its part of speech, and the first words of syntactic constructions were coded also to show the function of the construction.

However, certain items were not given a part-of-speech code, but were "boxed"; that is, they were underlined, or the first four letters of words five or more letters long were underlined. Consequently, they will be retrieved not by their code but alphabetically. These items are the most frequent "function words"[32] (articles, pronouns, prepositions, modal and auxiliary verbs, etc.) and were thought to be of sufficient importance to warrant their retrieval individually. Thus, unless a "boxed" word has a grammatical function code number, it will have no number at all.

The codes have at most four figures, and were determined on three "levels": 1) Part of speech (first and second figure); 2) Function of words or phrases in the clauses (third figure); 3) Function of clauses in the sentence (fourth figure). E. g.

John	came	when	I	called	him.
1619	44	ØØØ5	ØØ1	44	ØØ3

Here John has the code 16 (1 = noun, 6 in the second place = proper name), followed by 1 in the third place = beginning of the subject, and 9 in the fourth place = beginning of the main clause. When gets no code in the first or second place, since it is "boxed" (underlined); being a conjunction, it gets no code for word or phrase function (third place), but, since it marks the beginning of a time clause, it receives 5 in the fourth place.

If a word is assigned a code only in the third or fourth place, all the places to the left are filled in with zeroes (ø). Thus when in the above example has three ø's before its 5. I has a 1 in the third place to mark it as subject, and two zeros before to fill the first and second places. But if a word has a code only in the first and second places, or in the first three, no zeros are put in the remaining places.

Water towers are...	and not:	Water towers are...
111 12		111ø 12øø

1. On the part-of-speech level (first and second figures) the following parts of speech are coded: nouns (1), adjectives (2), adverbs (3), verbs (4), and numerals (5). An additional group - others (6) - is added to cover some special cases.

a) Nine different codes are used to indicate nouns: 11 = nominative singular, 12 = nominative plural, 13 = Saxon genitive in singular, 14 = Saxon genitive plural,[33] 15 = converted nouns (i.e. other parts of speech used as nouns), 16 = proper nouns in the singular, 17 = proper nouns in the plural,[34] 18 = geographical nouns in the singular, 19 = geographical nouns in the plural.

b) Adjectives are indicated by five codes: 21 = positive adjective, 22 = comparative adjective, 23 = superlative adjective,[35] 24 = quasi-comparative (superior, major, junior, and the like), 25 = adjectival modifier consisting of two or more elements (complex attribute - over-all, wall-to-wall, downtown).[36]

c) Adverbs get three codes: 31 = positive adverb, 32 = comparative adverb, 33 = superlative adverb.[37] The function of adverbs is coded in the third place (see 2. below).

d) Verbs and their forms are indicated by ten codes: 41 = infinitive, 42 = present, 43 = imperative, 44 = -ed forms used in the active (as preterit and perfect), 45 = -ed forms used as passive participles,

46 = other -ed forms,[38] 47 = -ing forms used for tense formation, 4ø = participle, participle construction, 49 = gerund, 48 = subjunctive (only in clear cases, where the subjunctive is different in form from the indicative: If he were ..., She insisted that he come).
48 48

e) Numerals are assigned four codes: 51 = cardinals,[39] 52 = ordinals, 53 = attributive compounds with numerals, 54 = non-attributive compounds with numerals.

f) Others. Although words on the "boxed" list are in general not coded in the first two places,[40] the following get a code nonetheless: 6 = the second element of a two-word verb (come in), 61 = by (introducing the agent in a passive construction: done by him, books by Mailer).
6 61 61

2. The word and phrase function level is marked by the third figure. When a group of words fulfills a function, the code is put under the first word of the group (Our new typist is...).
øø1

On this level the following functions are coded:

a) øø1 = Subject. When expletive there takes the place of the subject, the real subject (usually following the verb) gets the øø1. E.g.

There has been much talk.
øø1

b) øø2 = Nominal predicate, including nominal complements to verbs.[41] E.g.

This is me; He is a lawyer; He called the plan a ...
øø2 øø2 øø2

c) øø3 = Direct object (I saw him)
øø3

d) øø4 = Indirect object - without a preposition only (Buy me a drink)
øø4

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17869 0019 11   IS   THAT 0002 THE  001  16   13   21   11     BEFO 008  16   IS   THE  002  46   11   OF   THE  49   11   WHC  0014
48447                                                          BEFO 008  16   16   5    I    001  AM   212
05753                                  THE  0059 11           BEFC 008  185  18   TO   0084 WHIC WE   001  ARE  46   AS   A    21
01335 005  46   AS   002  21   AS   54   ON   005  11   51     BEFO 008  49   WITH 006  51   12
00437 THE  001  51   21   21   12   44   AT   008  46   12     BEFO 008  51   12   AT   006  THE  16   11
30349                111  ON   008  THIS 11   IS   232    BEFC 008  8    ANC  8    CR   8
22486 OF   THE  16   AND  44   THE  003  11   A    005  31     BEFO 11
07514                A    0019 FEW  12   OF   11   JUST 005    BEFO 11   WHEN 0005 161  16   WAS  IN   006  THE  11   CF   MER  52
24186 11   THAT 0003 THE  001  11   44   UP   6    EVEN 0005   BEFO 111  WAS  CVER 002
12421                                  AS   0009 456          BEFO 111  42   THE  003  11   11   ANC  IN   0069 11   51   THE  001
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45807 TO   16   ME   001  44   HERE 006  A    005  11   12     BEFO 51   AND  44   163  IN   0C6  THE  11   44   A    C03  46   11

39571 AT   008  ALL  41   THIS 0C3  11   OF   11   *W   007    BEHI
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38026                161  16   44   A    003  11   FROM 006    BEHI THE  11   ANC  WITH 008  A    21   9    ACN  WAS  442  FCR  CC9
24779 THE  44   OUT  6    AND  44   INTO 006  11   JUST 006    BEHI THE  11   CF   THAT 21   11   OF   11   ANC  THEN 44   OFF  6
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13901 OF   11   44   FROM 006  A    16   11   WHIC 0014 44     BEHI 006  A    11   OF   11   12   AND  211S 12   THAT CC14 WERE 122
21331                                  161  WAS              BEHI 006  A    25   11   ONLY A    11   11   BEFO CC4  MIM
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43883                HER  0019 11   HAD  44   OFF  6    AND  44   BEHI 006  MER  12   459  BY   CC8  THE  11   ANC  CCC5 ME   CC1  CCLL
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43200 MIM  003  INTO 006  THE  11   11   409  THE  0C3  11     BEHI C06  MIM
43704 12   44   317  HIS  0019 21   21   11   44   OUT  6      BEHI 006  MIM
48340 ANC  44   TOWA 006  THE  11   WITH 008  16   AND  16     BEHI 006  MIM
43829                                  THE  0019 11   44   FROM 006  BEHI 006  MIM  AND  0009 161  44
38132 A    0019 11   WAS  47   HIS  003  11   THEY 0019 44     BEHI 006  MIM  AND  44   TO   006  13   11   21
38613 44   A    003  11   409  THAT C003 I    001  WAS  STIL   BEHI 006  MIM  BUT  0003 ME   001  WAS  TO   CC4  THE  11
49307 ME   0019 44   HIS  003  11   AGAI 006  THE  11   11     BEHI C06  MIM  BUT  0009 THE  001  21   21   12   CF   11   44   THEM
42712                                                          BEHI 006  MIM  HIS  001  12   44   WITH 008  49
38609                                  I    C01  44   516  A    11   BEHI 006  MIM  LETT 409  123  OF   12   41   IN   6    BETW CC4  US
30521 ANC  123  BUT  0009 ME   001  HAS  NOT  44   THEM 003    BEHI 006  MIM  ACR  0009 DOES ME   C01  41   THEM 003
34576 NOW  005  469  ON   006  13   21   11   161  COUL 41     BEHI C06  MIM  THE  003  11   CF   ANCT
45032                                  1619 44   409            BEHI 006  MIM  TO   0000 41   THE  C03  11   AND  41   IT   C03
38581                                  I    0019 WAS  *T   316  BEHI 006  MIM  WHEN 0005 ME   C01  44   THE  CC3  45   11   ANC  44
47440 1619 44   163  12   13   11   AS   0005 ME   001  44     BEHI C06  MIM  409  CUT  6    A    003  469  11   11   WITH 008  11
38102 BEFC 005  11   WHIL 0005 THE  001  11   44   AROU 6      BEHI 006  MIM  409  TO   41   THE  C03  11   AT   C06  HIS  21   11
378HO                                  I    001  HAD  BY   003  11   BEHI 006  HIS  11
44602 BUT  TO   0001 41   MIM  003  AND  41   HIS  C03  11     BEHI 006  IS   NCT  212
32423 213  11   IN   006  11   OF   THE  11   AS   317  AS     BEHI 006  IT
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23585                                                
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e) ØØ5 = Time adverbial

f) ØØ6 = Place adverbial[42]

g) ØØ7 = All other adverbials (without preposition)

h) ØØ8 = Prepositional phrases (unless falling under ØØ5 or ØØ6)[43]

i) ØØ9 = Related, unrelated, absolute participial constructions[44]

j) ØØØ = Apposition, written under the first and last words.[45] E.g.

The volcano erupted, a remarkable sight
ØØØ ØØØ

3. The clause function level is marked by the fourth figure. On this level the following functions[46] are coded:

a) ØØØ1 = subject clause

b) ØØØ2 = predicate clause

c) ØØØ3 = object clause, including: (α) complements to verbs, e.g. I said that he couldn't go; (β) complements to nouns, e.g. The fact that he couldn't go;[47] (γ) complements to prepositions, e.g. Everything was fine except that it rained.

d) ØØØ4 = attributive (relative) clause, including: (α) ordinary relatives with an antecedent, e.g. The man that (or whom) I told you about; (β) seemingly adverbial clauses if they have a nominal antecedent, e.g. The time when (or that) he arrived; The place where he lived; The reason why he came.

e) ØØØ5 = adverbial clause of time

f) ØØØ6 = adverbial clause of place

g) ØØØ7 = adverbial clause of condition (If I had gone..., Had I gone...)

h) ØØØ8 = all other adverbial clauses

i) ØØØ9 = main clause - coded only when there is another clause (co- or subordinate) in the sentence, or a direct or "style indirect libre" quotation

j) ØØØØ = purpose expression with to (He did it to please me; ... in order to please me)
ØØØØ ØØØØ

All these codes are put under the first word.

Single-digit codes do not combine with other codes. They are used to mark:

a) 4 = a small number of cases of unclear syntactic structure, particularly of the no matter... type (He'll do it no matter what; the more, the merrier)
4 4

b) 5 = interjections, vocatives, yes, no (Yes, John, sure, I'll...)[48]
5 5 5

c) 7 = parenthetical expression (the code must be put both at the beginning and at the end of the inserted matter)

d) 8 = unusual object group (He did not say by how much...)
8 ØØ8

e) 9 = direct question (Listen, Sam, will you help me?)
9 ØØØ9

5. Topics. The contrastive analysis of Serbo-Croatian and English is being carried out at four linguistic levels: a) phonology, b) morphology including word formation, c) syntax, d) lexis. The phonological, morphological, syntactic and lexical structure of English is being treated under about 50 different headings.

In phonology the following topics are being analysed: a) stress, b) rhythm, c) sentence intonation, d) the vowel system, e) the system of consonants, f) the morpho-phonemics of Serbo-Croatian and English.

In syntax the analysis is focussed on the sentence as the point of departure. The following topics are being discussed: a) the subject,

b) the predicate consisting of verb or verb + predicative, c) the predicate consisting of verb + object (direct object, indirect object and object complement), d) the simple sentence. These topics have been further subdivided into: 1) Subject composed of noun or noun sequence; 2) Subject composed of pronoun or pronoun sequence; 3) Subject composed of verb or verb sequence; 4) Subject composed of clause; 5) Elliptical sentences; 6) Predicate consisting of verb; 7) Predicate consisting of verb + predicative; 8) Predicate composed of verb and direct object; 9) Predicate composed of verb, indirect object and direct object; 10) Predicate composed of verb, direct object and object complement.

The breakdown of topics was done formally. So, for instance, topic 6 discusses a predicate expressed merely by a verbal form, without regard to "deep structure" or to whether it can be shown that an object exists in some transformation. Topic 7 discusses the predicate consisting of verb + predicative. A new breakdown is made when besides a verb or a linking verb and a predicative there appears an adverbial[49] as well. So we get two more topics: 6a) Verb + adverbial, and 7a) Verb + predicative + adverbial.[50]

In terms of our basic elements we have the following predicate groups: verb alone, verb + adverbial, linking verb + predicative, and linking verb + predicative + adverbial. According to this a further specification of topics 6 and 7 has resulted in:

1) Predicate expressed by an intransitive verb alone (i.e. by a verb used intransitively);

2) Predicate expressed by an intransitive verb + adverbial modifier;

3) Predicate expressed by a linking verb + predicative;

4) Predicate expressed by a linking verb + predicative + adverbial.[51]

For practical purposes the above topics have been further subdivided into several working assignments for analyzers:

a) Intransitive verbs + adverbs in English and Serbo-Croatian;

b) Intransitive verbs + clause in English and Serbo-Croatian;

c) Sentence adverbials;

d) English intransitive verbs vs. Serbo-Croatian reflexive verbs;

e) English intransitive verbs vs. Serbo-Croatian non-reflexive verbs;

f) Intransitive verbs + adverbials or complements containing non-finite verbs;

g) Linking verb + verbless subject complement;

h) Linking verb + verbless subject complement + adverb;

i) Linking verb + verbless subject complement + infinitive phrase;

j) Linking verb + that-clause;

k) Linking verb + dependent interrogative clauses;

l) Linking verb + structures with the -ing form of the verb;

m) Exclamatory sentences with linking verbs.

A breakdown was made of prepositional phrases, too, according to whether they are predicatives (He is in the garden),[52] adverbial modifiers (He works in the garden), or prepositional objects (He is listening to the music).

Word order is worked on wherever it appears relevant to the topic discussed; later there will be a separate topic dealing with word order as a synthesis of various topics in which it was dealt with.

The following topics dealing with parts of speech are being analyzed: the noun (number and gender), nominalization, articles, pronouns, adjectives, numerals and expressions of quantity, the verb (aspects, voice, modal verbs, imperative and its periphrases, formal expression

of /a/ present time, /b/ simultaneous action, /c/ general time, /d/ past time, /e/ future time).

In morphology comparison is discussed, while word-formation covers: composition, derivation and conversion.

In lexis we plan to study contrastive patterning in semantically corresponding clusters, in synonymy groupings, in Latin-root words, in frequency correspondences, etc.

6. The work of the analyzers. Working on a topic assigned to him, each analyzer aims at writing a paper revealing the results of his analysis. The final version of the paper is to contain three parts: 1) a short statement of the problem, together with a summary of the results arrived at; 2) a concrete contrastive analysis documented by the corpus material; 3) a pedagogical section giving practical implications (usable in teaching).

As he works, the analyzer makes progress reports: there are three reports on each topic, and the third - final - report is published in Series A. Reports of the Project's publications, whose main aim is to maintain contact among Project workers as well as to inform a wider audience about work in progress.

On the basis of our work so far, we have adopted the following procedure for the groups' and individual workers' participation in work on the reports. An analyzer takes up a topic, studies the relevant literature, and writes a first report. This consists of a sketch of the problem made on the basis of general works,[53] of specialized literature[54] on the problem, and of the analyzer's own knowledge and experience, and with the help of consultants. This first report is submitted by the analyzer to the group leader so that it can be discussed with him and the proposed method of treatment of the topic can be approved.

The analyzer continues the analysis of his topic on Serbo-Croatian material and with Serbo-Croatian grammars[55] and specialized literature on the problem, so that he examines the topic contrastively. Thus we get a full report on the contrastive analysis of a topic. This second report is read by all the members of the group and discussed at a regular group meeting. A copy of this report is sent to other groups where one member studies it and reports on it to a group meeting, so that the group as a whole can take part in formulating comments and criticisms. On the basis of the discussions and group members' comments the analyzer supplements his second report with the suggestions of his own and other groups, and in this way composes the third - final - report which is printed.

But this third report is not the final treatment of a topic. Now the analyzer will receive the required material for his topic from the corpus (contrastive concordances - slips with sentences selected from the corpus as relevant for each individual topic) and will complete his report with this new material. This will serve two purposes: 1) illustrating the conclusions already arrived at, 2) checking and supplementing results taken from the literature during the first phase of our work. So the analyzer will arrive at the final conclusions of his analysis. This final version is the end of the work on an individual topic and will be printed in Series B. Studies of the Project's publications.[56]

The analyzer seeks to supply pedagogical implications of the work on his topic. In some cases these are given at the end of the report, and in others in the course of the discussion of the topic itself. Pedagogical collaborators (specialists in teaching methods) will, together with the analyzers, work out special contributions in this area and these will be printed in a separate publication: Pedagogical

Implications.[57] In connection with this we are beginning systematic experiments in several schools at different levels, in which we will carry out tests on the pedagogical application of the conclusions from the reports and the studies.

Analysis[58] begins with target-language - English - structures (categories, word classes, constructions), which are presented in terms of a given description to obtain topics for contrasting. Exceptionally, analysis can begin with the source language, i.e. Serbo-Croatian. We envisage a number of studies each of which will result from the analysis of several topics dealing with English grammatical units. These studies represent grammatical units existing as units only in Serbo-Croatian. They will be synthesized on the basis of the results achieved in various studies. Such topics will deal with Serbo-Croatian cases, aspect, etc. We also expect to get some synthetic studies which will be based on the results achieved in individual studies, and aim to cover a wider field in order to present some general tendency or one practical part of the system of the target language, such as verbal forms and their relations to time, word-order, etc.

Two types of relationship between the structures of Serbo-Croatian and English are taken into consideration: when a) the given structure occurs in English but it does not occur in Serbo-Croatian, b) the given structure occurs in both languages. If the given structure occurs only in English and not in Serbo-Croatian, the learner's native knowledge of Serbo-Croatian will neither inhibit nor facilitate the acquisition of the English structure. (E.g. the article in English versus no article in Serbo-Croatian).

If the given structure occurs in both languages, they partially overlap, formally and semantically. The cases of partial overlap are

a primary concern of contrastive analysis since it is in these cases that the Serbo-Croatian learner of English will be tempted to assume that the overlap is total and will distort the English structure in an attempt to secure conformity with its Serbo-Croatian counterpart. This is the case with verbal tenses, adjectives, possessives, and numerous other structures.

Two possibilities exist in cases of overlap: first, the English structure may have a wider range than the corresponding Serbo-Croatian structure; second, the range of the English structure may be narrower than that of the corresponding Serbo-Croatian structure.

In analysing the possessive adjectives contrastively, Serbo-Croatian vs. English, we have noticed that their range of application in English extends beyond their range of application in Serbo-Croatian and that it covers, among other things, part of the area occupied by the Serbo-Croatian personal pronouns.

On the other hand, a contrastive analysis of reflexivity in Serbo-Croatian and English has shown that Serbo-Croatian is richer in the use of reflexive forms than English.

In both cases the analysis starts from English, outlines the syntactic field of the English structure, contrasts it with the Serbo-Croatian equivalent to note the area of overlap, and lists possible areas of interference. Where the Serbo-Croatian structure has a wider range, the remaining instances of its usage will be analysed in connection with the description of certain other structures in English.

In our Research Guide for Project Workers dealing with syntax and morphology the following analytical procedures are recommended:

a) The analyst begins with the description of the English structure.

b) Next, formal-semantic correspondences in Serbo-Croatian are sought. Since English and Serbo-Croatian are

sufficiently related to enable us to set up our categories in terms of a meta-language common to both, correspondences should first be sought in Serbo-Croatian categories of the same rank. After that, correspondences of other ranks, possibly even at other levels, should be examined.

c) Once the correspondences have been established in Serbo-Croatian, they are analyzed to see how they differ from their English counterparts. This is the process of contrastive, or differential, analysis proper.

d) Predictions for learning are made on the basis of such contrastive, differential analysis. Then tests are devised to check on the accuracy of these predictions.

e) Teaching strategy and materials are planned in the light of the predictions and test results.

7. Work done and results achieved so far: a) Preparatory work. We have printed several volumes of Project publications which represent the first results of the Project. The first volume under the title of The Organization and Objectives of the Project[59] appeared in 1968. In this volume I have given general information on the Project, with a description of the Project design and a list of Project personnel with their organizational affiliation and their Project responsibilities.

Prilozi i gradja (Contributions and Materials) is a special issue of our publications. It is written in Serbo-Croatian and is meant for Yugoslav readers who do not read English but are interested in contrastive analysis of Serbo-Croatian with other languages. Four articles are printed in this volume. They deal with some questions of methods and approach, important in the preparatory stage of our Project. In an article "Initial Phases of Work on the Serbo-Croatian and English Contrastive Analysis Project"[60] I have summarized the results of the work on the Project over the three-year preparatory period (1966-1968) and have set forth in detail the structure of the Project and methods of work.

When trying to decide which of three existing approaches in linguistics to apply in our work we refer to Prof. Pavle Ivić's article "A Few Words on Problems of Method"[61] which suggests that although the generative approach seems most adequate for work on the Yugoslav Serbo-Croatian and English Contrastive Project, compromises must be made with the structural approach.

Another problem which has to be solved is how to approach a contrastive phonological analysis of Serbo-Croatian and English. Prof. Ljubomir Mihailović states, in his article "The Contrastive Analysis of Phonological Systems"[62] that in structuralist linguistics, phonological contrasting is theoretically impossible, as every element affects the relations in the whole system, and different systems are incommensurable. But in practice it is worthwhile to compare the pronunciations of the elements of different languages, and their distributions in linguistic units of various sizes (word, utterance, etc.). In this Project this is our primary concern and the analysis on the phonological level will aim at such practical results.[63]

In our decision to use the computer for the processing of the corpus we relied on the detailed analysis done by Dr. Željko Bujas in his article "The Use of the Computer and the Flexowriter in the Serbo-Croatian and English Contrastive Project"[64] in which he has shown how much manual work can be saved by using the computer and the flexowriter in copying, arranging and concordancing the corpus material.

b) Studies. Apart from all these theoretical and practical discussions linked with the work of the Project during the preparatory period, individual researchers directly or indirectly connected with the Project have written some articles of theoretical interest which were stimulated by contrastive analysis in general or by our Project

in particular. These articles have appeared in two volumes of our publication called Studies.

Dr. William Nemser[65] discusses approximative systems which a learner sets up at each stage of learning the target language. Pedagogically-oriented contrastive analysis must study such systems, rather than merely analyzing the source and target languages with no regard to learner behavior.

Dr. Vladimir Ivir[66] points out the differences between translation and contrastive analysis. The former deals with semantic correspondences in texts, the latter with formal-semantic correspondences between language systems. Translation material can nevertheless assist in contrastive work, because some degree of formal correspondence is preserved in all translation, however free. Yet many apparent correspondences are found unusable by the analyzer working on a problem.

Dr. Leonardo Spalatin,[67] on the other hand, rejects the formal correspondence approach by stating that it establishes similarities of little practical value and does not allow for semantic similarities between elements on different ranks or levels in the languages contrasted. He pleads for the semantic approach: languages can be effectively contrasted only on a semantic basis, specifically, on the basis of translation equivalence.

In his second article Vladimir Ivir[68] goes on discussing the differences between contrastive analysis and translation. Translation equivalence serves merely to help isolate items of structure with shared meanings in the two languages. After that point, the items of structure thus isolated are examined for their syntactico-semantic properties, which are then compared.

Jerry L. Liston[69] disagrees with both attitudes, Ivir's and Spalatin's: neither the formal-correspondence approach to contrastive analysis nor the translation-equivalents approach is wholly acceptable. One must remain flexible until more data on the errors made by language learners are published.[70]

The translation method chosen for the Yugoslav Serbo-Croatian and English Contrastive Project requires a corpus of English to be translated into Serbo-Croatian. Why we have chosen[71] the Brown Corpus of two existing corpuses (the London Survey of English Usage and the Brown University Standard Sample of Present-Day Edited American English), and how it was shortened and translated into Serbo-Croatian, has been carefully discussed and justified.[72]

Other contributions printed in Studies 2 are perhaps less directly connected with the work on the Project. In one of them[73] Prof. Eric P. Hamp points out that contrastive statements for closely related or connected (e.g. Balkan) languages may differ interestingly from those for more distant languages.

Dr. Ljiljana Mihailović discusses differences in pronominalization of the noun phrase in English and Serbo-Croatian.[74] When a noun phrase identical to and co-referential with an antecedent noun phrase is pronominalized, both languages use the normal personal pronoun. When a noun phrase is not co-referential with its antecedent, English uses a special indefinite pronoun, one, but Serbo-Croatian still uses the personal pronoun.

In a long article[75] Prof. Charles E. Bidwell proposes a phonemic analysis and some morpho-phonemic rules, and discusses the inflections of Serbo-Croatian nouns, numerals, pronouns, and adjectives in terms of these. The results of this analysis will be of use to the

Project workers dealing with the topics connected with cases.

c) Reports. All the topics we propose to deal with in the Contrastive Analysis of Serbo-Croatian and English have been distributed and discussed in work groups and Project workers have already produced a number of reports which have gone through the regular procedure[76] and are already or will soon be printed in the publication called Reports.

Some general comments on the first group of reports[77] have been summarized as follows:[78] Contrastive analysis varies with the degree of relatedness of the languages, the levels of the metalanguage used, as well as with the direction chosen (from one language to the other, or both ways).

Although we expect final results of all topic analyses to take the form of studies which are based on the reports and completed and checked by means of the corpus material offered to the analyst by the computer in the form of contrastive concordances, we propose to give a summary of the work done so far by Project workers and published in their reports.

From syntax analysis focussed on the sentence as the point o departure five reports have already been printed: two on nominal group, one on inversion, and two on linking verb + complement.

Nominal groups[79] can be noun-headed or adjective-headed. The various uses of the two kinds show that they are largely similar in the two languages, except that Serbo-Croatian does not normally use a noun group as a modifier. The main difference is: English noun groups have strict internal ordering; Serbo-Croatian is not so restricted.

The analysis of noun phrases as subject[80] shows that subject definition in English is split between position and concord. Various

inversions mask the positional criterion, sometimes giving other material subject position and "feel". Serbo-Croatian subject noun phrases are in the nominative and function in the number-person-and-gender agreement rule, irrespective of their place in the sentence. However concord may not always show subjecthood in Serbo-Croatian.

Inversion[81] of subject and verb is common in both languages when non-subject elements are put first: question words, adverbial modifiers and embedded direct quotations in both languages, verbs and conjunctions in Serbo-Croatian only, expletive there, so, neither, nor, verbal particles in English only. In English, unlike Serbo-Croatian, indirect questions never invert.

Noun-phrase, adjective, prepositional-phrase, and locative complements of the linking verb be[82] differ in the use of the article in English, the greater restrictions on inversion in English, the agreement of the English verb with whatever noun precedes it, and the differing use of pronouns. With other linking verbs, the Serbo-Croatian translation may be a single inchoative verb, or a verb + adverb (as with some verbs of sense perception).

In English, that clauses, as clauses and clauses beginning with question words can all occur as predicates after be.[83] In Serbo-Croatian, the equivalent clauses are often introduced by correlatives (ono što) or various inflected or prepositional forms unlike modern English. Where clause constructions are used for emphasis in English, Serbo-Croatian generally uses other means such as word order.

The second group of reports deal with topics in connection with the parts of speech. The noun is the subject of two reports: one dealing with gender and the other with number.

Gender[84] in English is merely "natural" and lexical and expressed only in anaphoric pronouns. In Serbo-Croatian it is an obligatory grammatical category not necessarily coinciding with sex reference. Both English and Serbo-Croatian have means for making human nouns specify women. The main difficulty for Serbo-Croatian learners of English is that they should not use masculine or feminine pronouns for inanimates.

Both English and Serbo-Croatian have a two term number system[85] for nouns (sg. and pl.) and in both languages number is determined by the semantics of the noun in question. Two basic differences are: the membership of the count, collective, mass, and abstract classes does not coincide, and English favours logical agreement even when this violates rules of formal agreement strictly held to in Serbo-Croatian.

Three reports deal with pronouns, one with the English possessive adjectives and their Serbo-Croatian equivalents, another with the English demonstratives (this - these, that - those) and their Serbo-Croatian equivalents, and the third with relative pronouns.

Distribution of possessive adjectives[86] in both languages depends on the semantic class of what is possessed and on identity or non-identity of the possessor with the subject of the sentence.

Using several criteria governing the use of this - these and that - those[87] L. Spalatin gives figures showing the frequency of different Serbo-Croatian translations in a small corpus, and explains the patterning of the translation equivalents.

The systems of relative pronouns[88] are largely similar in English and Serbo-Croatian, but the learner may incorrectly equate some of their individual elements if the differences in distribution are not brought out.

Adjectives are thoroughly discussed in two reports: the first is of a more introductory and general nature, the second deals with a specific use of adjectives as predicates.

Adjectives[89] are treated both morphologically[90] and syntactically. Prenominal adjective positions in English and Serbo-Croatian are similar; so are some postnominal uses. But English has some fixed expressions of the latter type that Serbo-Croatian lacks. Predicative uses are also similar, but after some linking verbs Serbo-Croatian uses an adverb form. Some English adjectives can be used only predicatively. English and Serbo-Croatian differ slightly in the complements adjectives can take.

Adjective predicates[91] with be, seem, and other linking verbs are similar in the two languages, but some verbs in Serbo-Croatian take predicate adverbs instead, or inchoative verbs are used instead of verb + adjective. The English subject may correspond to a Serbo-Croatian oblique case with an adverb, since Serbo-Croatian lacks some rules forming subjects. Adjectives can have prepositional-phrase, clause, or infinitive complements. A classification is given on the basis of occurrence in these different patterns.

Numerals and expressions of quantity are dealt with in one report.[92] A detailed analysis shows that cardinal and ordinal numerals are formed and used similarly, in general, in both English and Serbo-Croatian. Non-numerical expressions of quantity can be determiners or quasi-nouns in English, and nouns, adjectives, or adverbs in Serbo-Croatian.

The verb is an item which offers more topics and consequently requires more reports than any other part of speech. Here we meet with the first problem - the category of aspect. As it is generally accepted in traditional grammar that English lacks this category, this

topic has to be, exceptionally, approached from Serbo-Croatian as the starting point.

The Slavonic obligatory imperfective/perfective aspect contrast in verbs has no direct correspondent in English, although there are elements that make verbs marked for something like aspect.[93] In particular, the progressive tenses (except for some future progressives) always correspond to Serbo-Croatian imperfectives; but the converse does not hold, which results in difficulties in learning English. The English perfect tenses show less correlation with perfective aspect. The simple tenses can correspond to both aspects.[94]

The system of verbal tenses (forms) and its relation to time relations both in English and Serbo-Croatian requires a detailed and complex analysis. This will be done as a synthesis of all the reports dealing with verbs when they are all written. So far only a few reports dealing with the verb have been printed and the general picture cannot yet be drawn.

English distinguishes "absolute present time" (usually expressed by the continuous tense) from "relative present", unlike Serbo-Croatian, although learners often identify their imperfective aspect with the former.[95] Serbo-Croatian uses present tenses for past time much more widely than English, and lacks sequence-of-tense rules. The uses of the present for future time are largely similar in the two languages. The English present simple in time and condition clauses corresponds to the Serbo-Croatian perfective present or imperfective futur egzaktni.

The English continuative perfect[96] corresponds to the Serbo-Croatian present and past of imperfective verbs; the English resultative perfect to Serbo-Croatian past (generally of perfective verbs). Starting from Serbo-Croatian it is often difficult to find sure criteria for when to use

the English present perfect. Learners should first be taught when not to use it and when it is obligatory.

Reflexive verbs[97] in English are lexically conditioned or express the subject's action upon itself. Serbo-Croatian has these same types, but also uses the reflexive particle in many constructions where English uses an intransitive verb, as well as for reciprocal actions.

English modal verbs offer by themselves quite a number of interesting features, and when contrasted with Serbo-Croatian even more. This is why three reports have dealt with English modals.

The first report[98] states some general facts: English modals and auxiliaries differ sharply from other verbs in the way they are negated, their invertibility with the subject, their tense formation, etc. Serbo-Croatian correspondents (morati, trebati, moći, htjeti, smjeti) do not form a set so sharply distinguished from other verbs, and the behaviour of the English items must be taught specially.

In the second report[99] various uses of three modals (must, should and ought to) are discussed and it is shown that their various uses (obligation, inference, etc.) differ in the ways they form their negatives and tenses, and that they take part differently in sequence-of-tense relations. In the same report the corresponding uses of Serbo-Croatian equivalents are explained.

In the third report[100] the various meanings and uses of ten English modals (shall, will, would, can, could, may, might, need, dare and used to) are discussed and their normal Serbo-Croatian equivalents given. The time reference of the verbs is specially noted, together with their functioning in the sequence-of-tenses and temporal and conditional clauses.

Another group of English verbs, the primary auxiliaries be, have and do presents some problems that ought to be specially discussed in the contrastive analysis of Serbo-Croatian and English. Their auxiliary and full-verb functions are treated,[101] with attention given to the non-emphatic pronunciation, their functioning under negation and in various tense forms, and some constructions (e.g. causatives with have) lacking counterparts in Serbo-Croatian.

Two features of word-formation have been discussed so far: derivation and composition. Grammars divide derivational morphemes according to the parts of speech that they form and according to their character as prefixes or suffixes.[102] Analytical procedure should not merely match corresponding morphemes, but examine translation patterns. E.g. corresponding to Serbo-Croatian -ost English has not merely -ness (-ity, -ty, -tion) but also phrases: Adj + character, being + Adj, etc.

Compounding[103] is far more common and less restricted in English than in Serbo-Croatian. Words falling into a pattern of compounding in one language generally do not have equivalents forming a pattern in the other. Interference can only be avoided by strenuous list learning.

d) Pedagogical Materials. The third type of results of the Project research are pedagogical materials. They present teaching materials demonstrating the applicability of the findings of contrastive research to the development of teaching materials. The first experiment is an attempt to discuss learning problems in presenting modal verbs[104] based on a report on modal verbs.[105]

Besides the false identifications of English modals with Serbo-Croatian verbs, discussed by D. Kalogjera,[106] Serbo-Croatian speaking learners are observed to make other errors: thus they use to before

infinitives after modals (*I must to go like I want to go). Taking Kalogjera's headings one by one, the author[107] shows that learners learn correctly the way modals are negated, but expect negated must to mean non-necessity, as negated Serbo-Croatian morati does. They often fail to invert subject and modal in questions and in sentences beginning with negatives (never, seldom, etc.), since Serbo-Croatian can put the modal anywhere in the sentence. "Echoes" of the type So can I cause difficulty, as do "tags" like He can, can't he? The lack of genuine past tense forms for English modals leads to many errors. The modals will, would, shall, should, must, ought to, can, could, may, might are taken up individually, and their different uses discussed. The English perfect infinitive, (to) have gone, is a recurrent source of difficulties, since Serbo-Croatian infinitives have no tenses. Several types of errors are noted. Substitution-table exercises are sketched out for all observed areas of difficulty.

e) Error Analysis. Three M.A. theses based on the errors in oral English made by learners in the Serbo-Croatian - speaking area on all levels (from beginners, pupils at elementary state schools and professional people learning English at evening schools, to University students and general speakers of English in Yugoslavia) offer us some of the necessary material that Liston calls for[108] and Nemser speculates about.[109]

It was as early as 1966 that Prof. Owen Thomas (of Indiana University, during his stay in Yugoslavia as Fulbright senior researcher) and I started some work on error analysis by recording learners of English in the Serbo-Croatian speaking area. Three of our post-graduate students took over that material and started to examine it with the intention of using it as a basis for their research on error analysis. They went on interviewing more learners so as to get a big enough corpus to start examining the system of errors made by learners of English in the

Serbo-Croatian speaking area. The idea was that this research would result in three M.A. theses.

The frame title for the whole research is Syntactic and morphological errors in the speech of learners of English in the Serbo-Croatian - speaking area. Within this general problem the division was made so that each thesis examines one group of errors:

a) Errors in the Morphology and Syntax of the Parts of Speech in the English of Learners from the Serbo-Croatian Speaking Area;[110] b) Errors in the Morphology and Syntax of the Verb in the Speech of Learners of English in the Serbo-Croatian Speaking Area;[111] c) Errors in the Syntax of the Sentence in the Speech of Learners of English in the Serbo-Croatian Speaking Area.[112]

The basic problem these theses have dealt with is to find: 1) errors in the use of the English parts of speech, following the traditional grammar division: a) substantive, b) pronoun, c) adjective, d) article, e) verb, f) adverb, g) numeral, h) preposition,[113] and 2) errors in the use of the main parts of the sentence (subject, predicate, object, adverbial modifier).

Any deviation from the rules for producing grammatical sentences is considered an error. Analysis of the material shows the following deviations from correct English sentence structure: a) deviations from correct word-order; b) omission of elements; c) repetition of elements; d) superfluous elements; e) incorrect embedding of clauses; f) errors in building constructions smaller than clauses.

Deviations from the rules in some parts of speech are of morphological and lexical nature, in others only lexical, due to the limited number of forms in English morphology.

The classification of the material was carried out according to the correct forms and structures, so that the deviations would come out clearly. In the analysis the correct form of the sentence is given first, then the ungrammatical English sentence is contrasted with its corresponding sentence in Serbo-Croatian. Finally the error is pointed out together with possible reasons for it.

The authors' investigations have shown that there are several causes for deviations:

1) One of the main causes of morphological and syntactic errors is interference from the native language. The conflict between a highly inflected language like Serbo-Croatian and a less inflected one like English is particularly obvious in sentence structure. While the former has a relatively free word-order, in the latter the order is fixed, which causes frequent syntactic errors in the Serbo-Croatian-speaking area.

2) A great number of morphological errors are due to incorrect analogies which a learner tries to establish within the foreign language. He tries to apply a general rule to all cases (e.g. he adds the plural ending -s to all substantives including those with different plural forms, or the comparative ending -er to all adjectives, etc.).

3) A deviation from the rules can be caused by the fact that the learner knows or is learning another foreign language. Then he applies the rules of the other language to English and makes a different kind of error.

4) An interesting type of deviation appears in the so-called "transitional phase" through which every learner passes when learning a foreign language. In this phase he has given up his native language system as a model, but has not yet completely mastered the system of the target language. In this phase the stimulus "new" means to him "different from the native language" and so he omits or adds elements

in the sentence.[114]

5) A further cause of deviations at all levels (morphological, syntactic and lexical) is incomplete mastery of the foreign language system due to the teaching methods used. Our experience shows - and a large number of errors confirm - that new structures are often introduced before the preceding ones have been properly learned, and that not enough attention is devoted to mechanical drill which would help form proper habits.

The types of morphological, syntactic and lexical deviations in spoken English in the Serbo-Croatian - speaking area, together with their possible causes, suggest that with a proper methodological approach to English teaching and a proper grading of the teaching material many errors could be avoided or corrected. As the latter is one of the aims of our project and the former will also, we hope, profit from the results of our project, it is more than obvious why we have been carrying out research at both levels: contrastive analysis and error analysis.[115]

Pedagogical implications should result from both analyses. There have been some attempts to challenge the pedagogical value of contrastive analysis[116] or to restrict its application in language teaching.[117] Error analysis has recently attracted the attention of some linguists and pedagogues.[118] Their point of view is that "contrastive linguistic analysis - no matter how refined - can only point toward a potential learning problem or difficulty. On the other hand, error analysis can tell the intensity of this difficulty, or the size of the problem".[119] Since the start of our work on error analysis in 1966 we have believed in this attitude.

The work on pedagogical implications will be based on the findings of the contrastive research, the analysis of errors (the results of the

research done in the three theses), and on the personal experience with errors of all the analyzers who being practical teachers of English and having been themselves once learners of English have enough practical knowledge to write the chapter on pedagogical implications in each report or study. Then pedagogical collaborators, specialists in teaching methods, will also help with their special knowledge of what should be done with learners' errors when teaching English in the Serbo-Croatian-speaking area.

When we start writing the contrastive grammar of English based on Serbo-Croatian special attention will be given to the hierarchy of errors developed from the results reached in the three above-mentioned theses and in our pedagogical materials. The final product of this project, a book (two volumes) on the contrastive analysis of Serbo-Croatian and English in which the results of the individual studies will be collated and summarized, will have in one section a sample set of teaching materials illustrating the applicability of the results of the studies to course development and to the teaching of all aspects of English language structure to students in all age groups and at all levels of proficiency.

f) Tests. A team of practical teachers at various schools and levels of teaching English are preparing a set of specially designed written tests which should supply additional material about the errors made by Serbo-Croatian speaking learners.

The same team will test all the statements about interferences and teaching implications developed in the contrastive analysis of a topic.

Typical errors that are found in testing will be used as material for further analysis. We want to find out whether an error is the result of language interference or any extralinguistic feature. Our teaching

experience has already proved that there are two kinds of errors:
a) some common errors as in word-order, indirect questions, the use of articles, etc., are definitely based on language interference;
b) quite a number of errors are not, we believe, due to language interference but to the method of teaching English at some levels and in some schools, or to insufficient time alloted to teaching a particular feature of English grammar or vocabulary (like tag-questions, verbs go - come - get, take - bring, etc.).

The reports already written will be distributed to the members of the team, and then small groups of investigators will be formed: an analyzer, a methods specialist and a practical teacher. Each group will write a set of tests to investigate whether it is language interference that causes difficulties in mastering a feature of English or not.

All the errors that are found to be common to all levels of teaching and typical for Serbo-Croatian speaking learners will be dealt with, and special productive drills and exercises will be drawn up as well as instructions for their use in the teaching process of English in this area. These drills will be a part of the pedagogical material we are going to offer in the final results of our work.

8) Co-operation of the Center for Applied Linguistics with the Project.
Among the many activities of the Center for Applied Linguistics in Washington is the help that it offers "to the Eastern Europe contrastive study projects".[120] Our Project is the only one in full operation and the first to have enjoyed the benefits of the CAL's aid to contrastive projects.

At the very beginning of the organization of our project, the Center displayed great interest in our work. Its director, Prof. John Lotz, has been following our project closely since his first meeting with us and representatives of the Ford Foundation in 1967, working with us in

organizational and professional matters as well as administrative and financial. Our project and its individual members are most grateful to him for his personal help in reformulating our publication plans, his work and discussions with members of the project who have spent time at the Center, particularly Dr. L. Spalatin[121] and Dr. V. Ivir, as well as his inspiring discussions with me.

The Center's work with our Institute is under its Foreign Language Program. The Program's director, Dr. William Nemser, has been of great help to us through his stays in Yugoslavia, the very active part he took in our third seminar where we adopted the final plans for the project's work, his most fruitful discussions with project workers about their topics, and his direct participation in the project[122] and its publications.[123]

Thanks to the Ford Foundation and IREX, three members of our project have been able to spend periods of time at the Center itself working on their project assignments with the assistance of Dr. Nemser and Dr. Gage of the Center: Dr. L. Spalatin, Dr. Ljiljana Mihailović, and Dr. V. Ivir. They were also able to aid the Project by carrying out some administrative tasks in the U.S.A. This form of co-operation has shown very good results and it is to be regretted that in this third and last year of the Project no member will go to the Center.[124]

Two short trips to the Center by the Director of the Project (Rudolf Filipović) were useful for co-ordinating the work and organizing professional co-operation, as well as in administering the connections of the Project with the Ford Foundation and the financial help it receives from the U.S. Government.

Finally, a significant aspect of the help the Project has received (first for one year through the Center from the Ford Foundation, and

this year from the Fulbright program) is the services of E. Wayles Browne, whose work as linguistic adviser and native informant in Zagreb has been very helpful to the individual project workers and the project as a whole.

NOTES

1. The Project is financed on the Yugoslav side by the Yugoslav Federal Commission for Cultural Relations with Foreign Countries, the Yugoslav Federal Council for Co-ordination of Scientific Research and the Croatian Scientific Research Council, and on the American side by the Department of State and the Ford Foundation.
   Cf.: Rudolf Filipović, The Organization and Objectives of the Project. The Yugoslav Contrastive Analysis Project: Serbo-Croatian and English. Institute of Linguistics, Zagreb, 1968, 17 pp.
   Rudolf Filipović, The Yugoslav Serbo-Croatian - English Contrastive Project. Mimeographed paper delivered to the Second International Congress of Applied Linguistics, 8 - 12 September, 1969, Cambridge. (This paper will be published in a Cambridge University Press publication with other papers presented at the Contrastive Linguistics Section.)

2. Cf. Rudolf Filipović, "Contrastive Trends in Applied Linguistics", CONTACT 14, 1970, pp. 13-17.

3. Rudolf Filipović, "Pedagoška primjena kontrastivne analize" (The Pedagogical Application of Contrastive Analysis), Pedagoški rad, Zagreb, 1969, XXIV, 3-4, pp. 138-145.

4. Rudolf Filipović, "Uloga kontrastivne analize u lingvističkom istraživanju" (The Role of Contrastive Analysis in Linguistic Research), Filološki pregled, Beograd, 1968, VI, 3-4, pp. 1-10.

5. Rudolf Filipović, "Zašto 'kontrastivna' analiza?" (Why 'Contrastive' Analysis?), Živi jezici, X, Beograd, 1968, 1-4, pp. 1-5.

6. We plan to elaborate this idea in a separate article at a later date.

7. A revised version of this lecture was printed under the same title in SRAZ, 23/1967, pp. 5-27.

8. Contrastive Structure Series, edited by Charles A. Ferguson, Center for Applied linguistics, University of Chicago Press.

9. William G. Moulton, The Sounds of English and German. Chicago - London, 1962.
Herbert L. Kufner, The Grammatical Structures of English and German. Chicago - London, 1962.

10. F.B. Agard - R.J. Di Pietro, The Sounds of English and Italian. Chicago - London, 1965.

F.B. Agard - R. J. Di Pietro, The Grammatical Structures of English and Italian, Chicago - London, 1965.

11. R.P. Stockwell - J.D. Bowen, The Sounds of English and Spanish. Chicago - London, 1965.

R.P. Stockwell - J.D. Bowen - J.W. Martin, The Grammatical Structures of English and Spanish. Chicago - London, 1965.

12. Dwight Bolinger, "A Grammar for Grammar: The Contrastive Structures of English and Spanish", Romance Philology, XXI, 2, 1967, pp. 186-212.

13. Rudolf Filipović, "A Contrastive Analysis of Serbo-Croatian and English", Studia Romanica et Anglica Zagrabiensia, 1967, No. 23, pp. 5-27.

14. See H.A. Gleason, Jr., "The Organization of Language: A Stratificational View", Monograph Series on Languages and Linguistics, No. 17. Edited by C.I.J.M. Stuart (1964), pp. 75-95.

15. Some of these are listed in: Hammer and Rice, A Bibliography of Contrastive Linguistics. Center for Applied Linguistics, Washington, D.C., 1965.

16. E.A. Levenston, "The Translation-Paradigm. A Technique for Contrastive Syntax", IRAL, III, 3, 1965, pp. 221-225.

17. M.A.K. Halliday, "Categories of the Theory of Grammar", Word, XVII, 1961, pp. 241-292.

18. H.W. Kirkwood, "Translation as a Basis for Contrastive Linguistic Analysis", IRAL, IV, 1966, 3, pp. 175-182.

19. L. Spalatin, "Contrastive Methods", SRAZ, 1967, No. 23, pp. 29-48.

20. Ž. Bujas, "Concordancing as a Method in Contrastive Analysis", SRAZ, 1967, No. 23, pp. 49-62.

21. R.L. Allen, A Summary of the Structure of the English Sentence, New York, 1964, pp. 23-67.

22. W.O. Dingwall, "Transformational Generative Grammar and Contrastive Analysis", Language Learning, XIV, 3-4 (1964), pp. 147-160.

23. See Rudolf Filipović, "A Contrastive Analysis of Serbo-Croatian and English", SRAZ, 1967, No. 23, pp. 5-27.

24. In 1964, three years before the beginning of work on this Project, a group of Zagreb linguists began to work on contrastive analysis at the Institute of Linguistics, with the help of the Institute's Fund for Scientific Work. Our students in Zagreb have been writing papers and theses on contrastive topics for a number of years. We should also mention several dozen papers for qualifying examinations for teachers, written as a preliminary to the oral exams; these papers have been on contrastive topics for several years.

25. In R. Filipović, ed., Prilozi i gradja 1 (Contributions and Materials 1), Institut za lingvistiku, Zagreb 1969, pp. 26-29.

26. At the second Project workers' seminar held in November 1967 in Novi Sad.

27. Rudolf Filipović, "The Choice of the Corpus for a Contrastive Analysis of Serbo-Croatian and English" in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 1, Zagreb 1969, pp. 37-46.

28. R. Quirk, "Towards a Description of English Usage", Transactions of the Philological Society, Blackwell, Oxford, 1961, pp. 40-61. R. Quirk, "On English Usage", Journal of the Royal Society of Arts, 114, London, 1966, pp. 837-51.

29. The main information on the sources for this corpus can be found in W. N. Francis, Manual of Information to Accompany a Standard Sample of Present-Day Edited American English for Use with Digital Computers. Department of Linguistics, Brown University, Providence, Rhode Island, 1964, 188 pp.

30. Cf. Ž. Bujas, "Primjena kompjutera i fleksorajtera u radu na projektu Kontrastivna analiza hrvatskosrpskog i engleskog jezika" (The Application of the Computer and Flexowriter in the Serbo-Croatian - English Contrastive Analysis Project), in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Prilozi i gradja 1 (Contributions and Materials 1), Zagreb 1969, pp. 35-59.

31. Three members of the Project (Dr. Željko Bujas, E. Wayles Browne and Mira Vlatković) worked on the system of and have been responsible for the coding of the corpus material.

32. About 250 words and forms have not been coded but retrieved through concordancing.

33. Saxon genitives are coded 13 or 14 whatever other category they might fall into: John's, Alps'.
13 14

34. The category of proper nouns also includes titles like Miss, Mr., Mrs., Dr., (the) Reverend, etc. preceding a name: Miss Joan S. Cowley. Initials are not coded. Names of buildings, clubs and the like are also included in this category (16).
16 16

35. 22 and 23 include only forms with -er, -est; more and most are coded as separate words.

36. There were some inconsistencies in determining what was a complex attribute and what two separate words:

	United	States	law
	25	18	11
or	18	18	11

A non-complex modifier which is a noun is coded like any other noun:

word list; Brown corpus.
11 11 16 11

37. Here, too, 32 and 33 include only -er and -est forms.

38. Verbs having an agent with by, or those to which a by-agent could be added without a change in construction, were assigned 45, and others were coded as 46. A true passive (45) used in any other way than together with to be in the predicate of a clause, is always coded as folows: either 452 for predicate complements - I want him flogged, or 459 for other uses - Distrusted by the world...

39. Dates of the form "Dec. 5" are coded with 51, since they are generally read "December five".

40. The verbs do, be, have, let, need get codes when they are infinitives (41), subjunctives (48) or gerunds (49).

41. Prepositional phrases functioning as predicatives are coded as ØØ5, ØØ6, or ØØ8 rather than ØØ2 because many cases are unclear with ØØ2.

42. ØØ5 and ØØ6 are only for unquestionable time and place expressions. E.g. at the meeting would be ØØ8, not ØØ5 or ØØ6.

43. Of-phrases are not coded unless they are place adverbials: the cat of Mrs. Smith of Oshkosh. (ØØ6)

44. Cf. R.W. Zandvoort, A Handbook of English Grammar. London, 1957.

45. If the apposition consists of only one word, ØØØ is still written twice to make it clear where it begins and ends: His employees, Finns, were... (ØØØ ØØØ)

46. Cf. R.W. Zandvoort, A Handbook of English Grammar. London, 1957.

47. This should not be confused with relatives: The fact which (or that) you discovered.

48. 6 = the second element of a two-word verb.

49. Adverbials were not taken as an independent structure in the basic breakdown of topics, so they will not be worked on as a separate topic.

50. Disagreement may arise as to whether something is an adverbial or not, or a predicative or not.

51. Here belongs the construction "to + NP" considered as an adverbial (He confessed to the police). This type of "to-phrases" must be distinguished from indirect objects.

52. The constructions to the right of the verb "to be" are taken as predicatives, not adverbials.

53. About 30 standard (grammatical) works on English grammar by the following authors: Curme, Deutschbein, Francis, Fries, Gleason, Hill, Jespersen, Kruisinga, Lees, Long, Poutsma, Roberts, Rutherford, Scheurweghs, Schibsbye, Sledd, Sonnenschein, Stageberg, Strong, Sweet, Zandvoort, and two Yugoslavs: R. Filipović and Ljiljana Mihailović, have been recommended. See R. Filipović, "Initial Phases of Work on the Serbo-Croatian and English Contrastive Analysis Project" in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Prilozi i gradja 1 (Contributions and Materials 1), Zagreb 1969, pp. 16-17.

54. Analyzers can use the Institute of Linguistics library which is equiped with such specialized literature. When necessary we try to get xerox copies of articles and studies through the Center for Applied Linguistics in Washington.

55. We have recommended four standard Serbo-Croatian grammars by Brabec-Hraste-Živković, Maretić and Stevanović (2).

56. Each study before it is printed will be approved by a publications committee consisting of the Project Director, Rudolf Filipović, one Yugoslav and one American consultant.

57. See p. 60.

58. To help analyzers in their work and co-ordinate their analysis a research guide dealing with matters of grammar (morphology and syntax) was written. See: William Nemser - Vladimir Ivir, "Research Guide for Project Workers. I Morphology and Syntax", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 3-8. We have planned to write two more guides before we start our analysis on the other two levels: phonology and lexis.

59. Rudolf Filipović, The Organization and Objectives of the Project, Zagreb 1968, 17 pp.

60. Rudolf Filipović, "Početne faze rada na projektu Kontrastivna analiza hrvatskosrpskog i engleskog jezika", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Prilozi i gradja 1, Zagreb 1969, pp. 3-25.

61. Pavle Ivić, "Nekoliko reči o problemima metoda", ibid., pp. 26-29.

62. Ljubomir Mihailović, "Kontrastivna analiza fonoloških sistema", ibid., pp. 30-34.

63. I have just been working on a system for comparing the sounds of Serbo-Croatian and English, which will be based on my previous works on the pronunciation of English and Serbo-Croatian.

64. Željko Bujas, "Primjena kompjutera i fleksorajtera u radu na projektu Kontrastivna analiza hrvatskosrpskog i engleskog jezika", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Prilozi i gradja 1, Zagreb 1969, pp. 35-59.

65. William Nemser, "Approximative Systems of Foreign Language Learners", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 1, Zagreb 1969, pp. 3-12.

66. Vladimir Ivir, "Contrasting via Translation: Formal Correspondence vs. Translation Equivalence", ibid., pp. 13-25.

67. Leonardo Spalatin, "Approach to Contrastive Analysis", ibid., pp. 26-35. Cf. also: Leonardo Spalatin, "Formal Correspondence and Translation Equivalence in Contrastive Analysis", ERIC, ED-025 766, 7 pp.

68. Vladimir Ivir, "Remarks on Contrastive Analysis and Translation", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 2, Zagreb 1970, pp. 14-26.

69. Jerry L. Liston, "Formal and Semantic Considerations in Contrastive Analysis", ibid., pp. 27-49.

70. See pp. 61-65 where we discuss our contribution to the study of errors made by the learners of English in the Serbo-Croatian speaking area.

71. Rudolf Filipović, "The Choice of the Corpus for a Contrastive Analysis of Serbo-Croatian and English", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 1, Zagreb 1969, pp. 37-46.

72. The detailed justification of using a corpus in contrastive analysis was probably needed too and I have given it in a separate article which will be printed soon.

73. Eric P. Hamp, "On Contrastive Contrastive Grammar", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 2, Zagreb 1970, pp. 1-13.

74. Ljiljana Mihailović, "On Differences in Pronominalization in English and Serbo-Croat", ibid., pp. 50-59.

75. Charles E. Bidwell, "Serbo-Croatian Nominal Inflection", ibid., pp. 60-104.

76. See pp. 46-50.

77. Printed in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969.

78. Ranko Bugarski, "Direction and Continuity in Contrastive Analysis", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 9-14.

79. Vjekoslav Suzanić, "The Nominal Group in English and Serbo-Croatian", ibid,, pp. 51-62.

80. Ljiljana Mihailović, "Noun Phrases as Subject in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 128-138.

81. Ljiljana Bibović, "On Inversion in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 15-24.

82. Midhat Ridjanović, "Linking Verb + Complement in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 2, Zagreb 1970, pp. 77-93.

83. Gordana Gavrilović, "Linking Be + Predicative Clause in English and Corresponding Structures in Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 46-51.

84. Dora Maček, "[illegible]nder in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 45-50.

85. Vladimir Ivir, "Number Agreement in English and Corresponding Structures in Serbo-Croatian" (to be printed in Reports 4).

86. Leonardo Spalatin, "The English Possessive Adjectives my, your, his, her, its, our, their and Their Serbo-Croatian Equivalents", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 2, Zagreb 1970, pp. 94-102.

87. Leonardo Spalatin, "The English Demonstratives this, these, that, those and Their Serbo-Croatian Equivalents", ibid., pp. 103-119.

88. Dora Maček, "Relative Pronouns in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 105-127.

89. Vladimir Ivir, "An Outline for the Contrastive Analysis of English and Serbo-Croatian Adjectives", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 31-38.

90. Comparison will be discussed in a separate report.

91. Vladimir Ivir, "Predicative Patterns for English Adjectives and Their Contrastive Correspondents in Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 2, Zagreb 1970, pp. 10-55.

92. Dora Maček, "Numeratives and Quantitatives in English and Serbo-Croatian", ibid., pp. 56-76.

93. Mira Vlatković, "Elements of Aspectives in English", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 63-70.

94. A further analysis of this problem has been made in a new report which will be printed soon.

95. Leonardo Spalatin, "Contrastive Analysis of the Present Tense in English and Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 139-152.

96. Maja Dubravčić, "The Present Perfect Tense and Its Serbo-Croatian Equivalents", ibid., pp. 13-45.

97. Omer Hadžiselimović, "English Intransitive Verbs vs. Serbo-Croatian Reflexive Verbs, ibid., pp. 52-61.

98. Damir Kalogjera, "A Survey of Grammatical Characteristics of the English Modal Verbs with regard to Interference Problems", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 39-44.

99. Damir Kalogjera, "Lexico-Grammatical Features of MUST, SHOULD and OUGHT TO and Their Equivalents in Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 2, Zagreb 1970, pp. 120-134.

100. Damir Kalogjera, "Ten English Modals and Their Equivalents in Serbo-Croatian", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 62-87.

101. Damir Kalogjera, "The Primary Auxiliaries BE, HAVE, DO and Their Equivalents in Serbo-Croatian", ibid., pp. 88-104.

102. Željko Bujas, "Brief Outline of Planned Work on DERIVATION", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 25-30.
Željko Bujas, "Derivation in Serbo-Croatian and English", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 2, Zagreb 1970, pp. 1-9.

103. Željko Bujas, "Composition in Serbo-Croatian and English", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 3, Zagreb 1970, pp. 1-12.

104. Mirjana Vilke, "Learning Problems in Presenting Modal Verbs Based on the Report 'A Survey of Grammatical Characteristics of English Modal Verbs with regard to Interference Problems' by Damir Kalogjera" (an article prepared to be printed in Vol. 1 of Pedagogical Materials).

105. Damir Kalogjera, "A Survey of Grammatical Characteristics of the English Modal Verbs with regard to Interference Problems", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1 Zagreb 1969, pp. 39-44.

106. Op. cit. in Note 105.

107. Mirjana Vilke: Op. cit. in Note 104.

108. See p.53 and Note 69.

109. See p.52 and Note 65.

110. Vera Andrassy, "Jezična odstupanja u morfologiji i sintaksi vrsta riječi (osim glagola) u govoru učenika engleskog jezika na hrvatsko-srpskom govornom području".

111. Jasna Bilinić, "Jezična odstupanja u morfologiji i sintaksi glagola u govoru učenika engleskog jezika na hrvatskosrpskom govornom području.

112. Stanka Kranjčević, "Jezična odstupanja u sintaksi rečenice u govoru učenika engleskog jezika na hrvatskosrpskom govornom području".

113 Conjunctions have not been examined since they do not appear in the corpus that has been analyzed.

114. Cf. William Nemser, "Approximative Systems of Foreign Language Learners", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Studies 1, Zagreb 1969, pp. 3-12.

115. We hope to print long summaries of these theses in Volume 1 of our publication Pedagogical Materials.

116. James E. Alatis, ed., Report on the Nineteenth Annual Round Table Meeting on Linguistics and Language Studies, Contrastive Linguistics and Its Pedagogical Implications, Monograph Series on Languages and Linguistics, No. 21, 1968, Georgetown University, Washington,

D.C. Introductory Remarks by J.E. Alatis, p. 3.

117. B.H. Banathy - P.H. Madarasz, "Contrastive Analysis and Error Analysis", Journal of English as a Second Language, IV, 2, 1969, pp. 77-92.

118. Cf. Libuše Duškova, "On Sources of Errors in Foreign Language Learning", IRAL, VII, 1, 1969, pp. 11-36.

119. B.H. Banathy - P.H. Madarasz, O.c., p. 92.

120. William Nemser, "Contrastive Linguistics at the Center for Applied Linguistics", The Linguistic Reporter Vol. 12, No. 8, June 1970, pp. 1-5.

121. Spalatin's article published in the ERIC series is the result of his conversations with Prof. Lotz. See Note 67.

122. William Nemser - Vladimir Ivir, "Research Guide for Project Workers. I Morphology and Syntax", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrastive Project, Reports 1, Zagreb 1969, pp. 3-8.

123. William Nemser, "Approximative Systems of Foreign Language Learners", in R. Filipović, ed., The Yugoslav Serbo-Croatian - English Contrstive Project, Studies 1, Zagreb 1969, pp. 3-12.

124. We are continuing to receive administrative assistance from Miss Lian Overbey of the Center, and I would like to take this occasion to thank her heartily for her co-operation.

DISCUSSION was opened by the Chairman, Dr. Ljiljana Mihailović (Beograd).

Ž. Bujas: A few words on some details of planned retrieval procedures may not be amiss along with these two samples of the coded English corpus.

Every English sentence from the (reduced) Brown Corpus is available in eight computer-printed copies on 10 by 20 cm slips, and the same will be true of the Serbo-Croat translation in four weeks' time.

Now, on the left edge of each printout sample you will notice a column of five-digit figures. They are the identifying numbers of actual sentences as they occur in the Brown Corpus. Their presence makes it possible to match them, in slip form, with their equally numbered counterparts in Serbo-Croatian translati (The translators were required to observe the sentence limits of the English original.)

The purpose of all this was to enable the analyzers to obtain all Serbo-Croat translation equivalents (in a full-sentence context) of any English item, or set of items, under analysis. The English items — retrievable either alphabetically or via the grammatical code — may be conveniently requested by the analyzer in combination of up to five (e.g. was to have gone ~ing), since this is, for practical purposes, the concordancing depth offered.

The project HQ in Zagreb, receiving an analyzer's request for "all you have on patterns of the type was to have gone ~ing", will locate all such occurrences in the concordance printout in a matter of mimutes. The relevant sentence numbers will be noted, and both English and Serbo-Croat parallel slips will be picked out manually from their respective files, and made available to the analyzer. He or she will now be supplied with research material lending itself readily to manipulati and as many tentative categorizations set up and scrapped as he sees fit.

E. König asked whether one should compare all of one language with all of the other, since some areas will yield no differences and other areas no comparability.

R. Filipović cited the list of topics chosen for analysis. Contrastive analysis will be combined with error analysis and tests to pick out the areas that really cause interference. But nothing is wasted by comparing areas which do not cause interference, since we would like a complete comparison of the systems of the two languages. Interference-causing items will be given special attention in the synthesis at the end of the project. Such theoretical questions as König's will continue to be worked on even after the official end of the Yugoslav project.

Ž. Bujas added that it is easier to code everything for concordancing than to know beforehand what to leave out.

J. Fisiak asked about the three linguistic models proposed (traditional, structuralist, generative). If some topics were written up structurally, wouldn't they have to be redone when writing a generatively-oriented synthesis?

R. Filipović: In fact most of our papers follow a structural approach, and so will the final synthesis. Some reports are more generative in nature due to the nature of their topics.

T. Slama-Cazacu asked how long the processing of the corpus was supposed to take, why written (rather than spoken) material was used, and how much context was included in the concordancing.

R. Filipović: Prof. Quirk's corpus includes spoken material, but is not available for computer processing - only the Brown corpus is. The phonetic contrastive work will be done separately. The computer processing should not take more than two months.

T. Slama-Cazacu: When will the error analysis (for selection of the topics) start?

R. Filipović: Three M.A. theses have already been done: one on errors in sentence structure, one on the verb, and one on other parts of speech. An analyze final study will rely on these results, on the corpus material, and on the tests of learners which will begin in January.

L. Dezső asked Ž. Bujas how to deal with zero elements (zero articles). Ca you study word order (e.g. in questions)? Can you also start from the Serbo-Croa translation? I have the impression that the Zagreb papers are not based only on classical American structuralism; will there be changes in methodology?

Ž. Bujas: Of course you cannot concordance what you don't have on the surf But we know that the zero article is where the could have been used. So we look for noun groups, or any group that can be preceded by the; we have nouns, nouns preceded by nouns, nouns preceded by adjectives, etc., all coded. Second, if word order means the order of groups, it is no problem since we have coded the first element of each sort of group and can locate it. We considered concordancing the Serbo-Croatian translation as well, but could not afford it.

R. Filipović added that the original plan was to have corpuses both of English and Serbo-Croatian. Our methodology has developed somewhat over the past two years, although perhaps not consciously.

V. Ivir: Perhaps what we are doing now is playing at the same time with structuralist and transformational approaches to contrastive analysis. We have concluded that a certain amount of mixture of the two is necessary.

M. Vlatković added that there is no TG of Serbo-Croatian available to us. In connection with Dr. Dezső's question, we have a special code for direct questions: this covers a great deal of inversion. Other inversions can be retrieve

on the phrase level: items like never, only can be listed, and we can search for these items followed by verbs followed by the subject. Inversion of clauses can be located from the code numbers of the types of clauses.

B. Paetz: When selecting your text did you take the stylistic aspect into consideration?

R. Filipović explained that the Brown corpus was cut in half in such a way as to retain more dialogues and other units closer to colloquial style. But the original distribution of the samples according to subject matter (e.g. politics, sports) was retained. We agree that colloquial style is most important for teaching purposes.

D. Chitoran was reassured by the methodological discussion, since the Romanian project has also spent much time on methodology. He agrees that no final decision on structuralism vs. transformationalism can be imposed.

How much has the corpus suffered in translation? Are the three levels (spoken of in connection with the coding) linguistically relevant or are they intended for the computer?

R. Filipović: We wanted a Serbo-Croatian corpus as well: Yugoslav prose translated into English by Englishmen and Americans. But even with two corpuses we would probably meet with some difficulties. Where it is evident that the corpus lacks something, we would ask Serbo-Croatian specialists to deal with the problems.

Ž. Bujas: I am the hardware man around here. The linguistic decisions were made by the group. The question was how the translation influenced the reduction of the corpus?

D. Chitoran: No, how it influenced the quality of the corpus.

Ž. Bujas: We looked for reasonably competent professional translators and asked them to work with normal care. Of course, the translation process does distort the situation: a complete, integral natural language system, and the damag easily-dominated, influence-ridden complex which is the translation. But this could not be avoided.

W. Browne explained that the three levels were set up for the convenience of the coders, not of the computer. We had to make up a coding system which would give us a lot of information about each sentence, but could be applied withou too much thought.

V. Ivir: What happens if material is translated badly in the corpus? It is the analyst's responsibility to sift out wrong translations. And even in beautiful translations, much of the material is unusable. Translating is one thing; contrasting another. Translating may reproduce content without keeping anything of the form which an analyst could contrast, as I tried to show in Studies 2.

Ž. Bujas: Even the translation material which is not usable for contrasting may be useful for other studies. The real problem is that of true patterns in Serbo-Croatian which have no clear counterparts in English. These will not show up in our corpus. So we had to have a few topics which, exceptionally, started from some point of Serbo-Croatian structure, such as verbal aspect or the cases.

R. Filipović: No analyzer is bound by the translation in the corpus if he thinks it wrong. Our translators were deliberately chosen outside the Project. - Some of the final, synthetic, studies (e.g. cases) will be compiled from various reports dealing with English constructions equivalent to Serbo-Croatian cases.

L. Spalatin: Being Serbo-Croatian speakers, we can better check translation into Serbo-Croatian than the other way round. - Translation equivalents, e.g.

the most frequently occurring translations for a given item, can in fact be valuable for contrastive analysis.

Ž. Bujas observed that one could even discuss whether to use translation at all in contrasting.

V. Ivir finds no theoretical - only practical - reasons for using translation in contrastive analysis.

E. König asks about conflicts between what is desirable practically and theoretically. If you go very deep in analysis, you may end up with statements useless in practice. A useful contrastive statement may be linguistically misleading. Thus in German many verbs of intention require the same subject as their complements have (i.e. infinitive complements), while in English the two subjects can be different: "I did not mean for you to go there". Perlmutter argues that there is an underlying causative clause ["I did not mean to have you go there"]. Do we say you can delete a causative clause with certain verbs in English but not in German, or do we say that these verbs differ with regard to the question of the two subjects? This is a very subtle problem, but such problems often arise, conflicts between what is desirable linguistically and what is desirable from a practical point of view.

R. Filipović: The analyzer's report can give whatever linguistic analysis he wants, but the chapter on pedagogical implications must give a practically usable treatment, decided on by the analyzer and the methodological supervisor.

V. Ivir asked the German equivalent of "I intend for you to go there".

E. König: "Ich beabsichtige, dass..." [a clause].

V. Ivir: A possibility for analysis is to start from English and look at the plurality of German translations; then you can see how to reach those from the deep structure you propose.

E. König: On the other hand, if you tie your analysis or contrastive statements to a particular detail of, say, transformational analysis, you may find it outdated in a year. For instance, certain transformations have now becom "dirty words" and the same is probably true of "deep structure".

Ž. Bujas pointed out our lack of knowledge of the learning process; we are not sure if it is parallel to TG procedures. So we only do the next best thing, we hope that the most frequent translation equivalent will be best to present to our learner.

R. Phillipson: The question of a theoretical framework appropriate for the description of one language but not for the description of two in comparison is very interesting inthe field of intonation. Thus the Survey of English Usage in London has set up a hierarchy of factors, tone units, features of pitch, volume, rhythm and so on, in some kind of sequence of priority, but in the actual teachin situation there may be a completely different set of priorities. If the chief characteristic of questions is the pitch going up or down, this may be irrelevant in teaching a foreign language because very probably you go up or down in the same way, and it is various other complicated features which you have to put across in teaching.

R. Filipović supports Phillipson's approach; very often we discuss a topi from a general linguistics point of view, and as soon as we get to the applicatio we have to chang- quite a lot. Intonation is a very good example.

With this the Chairman closed the discussion.

Jacek Fisiak (Poznań, Poland)

THE POZNAN POLISH - ENGLISH CONTRASTIVE PROJECT

Polish-English contrastive studies in Poland began to develop in a systematic way five years ago. The idea for an organized research project in that area was launched by the present speaker in 1964. In 1965 when the Institute of English was reopened at the University of Poznań, the project assumed a definite shape, and several topics were immediately assigned as Ph. D. dissertations. These dissertations together with some narrower research problems were considered as pilot projects for a larger contrastive studies project with several objectives as outlined below.

Although the core of researchers consisted of the Poznań Institute staff members, a numerous group of young linguists from Lódz and Warsaw joined the project and began to collaborate from the outset.

The first analyses undertaken in 1965 were based on either structural or transformational models, depending on the prior linguistic training of the project's participants. However, early in 1967 it was accepted that the most explicit model should be accepted as the basis for adequate contrastive analysis and consequently the transformational generative model has been adopted since then, in spite of its numerous weaknesses which were noticed but which in our opinion could not be a sufficient reason for considering TG a less adequate theory than traditional or structural. These weaknesses, in fact, opened new vistas for contrastive studies and served as a basis for new theoretical objectives for them.

From the beginning it has been accepted that the term "contrastive studies" should be used in a broader sense including both the studies of the differences and similarities between two languages under comparison, for it is obvious that the ability to differentiate also implies the ability to identify, i.e. differences and similarities are in complementary distribution, and no complete characterization of one language vis-a-vis another can be given without taking both these aspects into consideration.

Since 1966 it has also been recognized that contrastive studies are of two basic types:

(1.) GENERAL THEORETICAL CONTRASTIVE STUDIES which are a part of typological linguistics, their aim being among other things to construct an adequate model for the comparison of two languages (including the formalization of such fundamental notions as congruence, equivalence, correspondence,etc.), to determine a method for quantifying the divergence and convergence of two languages or language components as, perhaps, a new universal, etc.

General theoretical contrastive studies are basic for SPECIFIC THEORETICAL CONTRASTIVE STUDIES (i.e. Polish-English, German-English, Hungarian-English, etc.) which by using the model constructed by the former should produce an exhaustive account of the differences and similarities between a given pair of languages. It should be noted that the comparison of any two languages should be made in abstract terms, i.e. the rules of the grammars of both languages should be compared and not their ultimate surface products. They should be bi-directional.

The relation between GENERAL and SPECIFIC theoretical contrastive studies may be considered as approximately parallel to the relation between UNIVERSAL grammar and the grammars of particular languages.

(2.) GENERAL APPLIED CONTRASTIVE STUDIES belong to applied linguistics. It has been assumed that they should provide a proper model for the comparison of two languages for a specific purpose (e.g., a simplification of the theoretical model for pedagogical purposes as illustrated by the use of "surface phonology" vs. "deep phonology"). General applied contrastive studies should also provide methods for the prediction-of-interference as well as for establishing the hierarchy of difficulty in learning the categories in a foreign language, etc.

The results and methods of general applied contrastive studies and the findings of specific theoretical contrastive studies should be utilized by SPECIFIC APPLIED CONTRASTIVE STUDIES for a given pair of languages to facilitate the preparation of proper teaching materials (e.g., for determining the appropriate selection, gradation, restrictions), the construction of language tests and the choice of teaching strategies.

Needless to say, since no theory of contrastive studies has thus far been proposed, what has been said above constitutes only a working framework for our research, determining the directions of our investigations and the objectives of our project. We feel that these objectives should

(1.) contribute to a theory of contrastive linguistics,

(2.) contribute to a theory of language in general,

(3.) contribute to the grammars of English and Polish,

(4.) provide an exhaustive contrastive grammar of English and Polish, both theoretical and applied, and

(5.) provide material for teaching English to Polish speakers and vice versa.

It should be pointed out that items (4.) and (5.) are central to our project even though items (1.), (2.) and (3.) are of no less interest or importance.

The purpose of the first pilot projects (1965 - 67) was to provide segments of a Polish-English contrastive grammar in the areas of syntax and phonology as well as to answer the question of the adequacy of a given linguistic model (structural or transformational) for contrastive studies; i.e. the aims were mainly theoretical.

During that period two larger pilot projects (doctoral dissertations) were completed:

(1.) Krzeszowski, T. P., 1966. Some Types of English and Polish Verb Phrases (unpubl.).

(2.) Granicka, I., 1967. English Past Tenses and Polish Aspect (unpubl.).

Furthermore, twenty-seven reports on individual problems of Polish-English contrastive grammar or on research in progress were presented at seminars held in Poznań once a month. Some of them appeared in print.

The most important theoretical papers on contrastive grammar published between 1965 and 1967 were:

(1.) Cygan, J., 1965. "On the System of Negation in English and Polish". Language Learning, XV, pp. 17 - 28.

(2.) Cygan, J., 1966. "Czas i aspekt w języku angielskim i polskim" (Tense and Aspect in English and Polish). Jezyki Obce w Szkole, X, 130 - 144.

(3.) Krzeszowski, T. P., 1967. "Fundamental Principles of Structural Contrastive Studies". Glottodidactica, II, pp. 33 - 40.

The applied aspects of contrastive studies, rather marginal in our project prior to 1968, were not totally neglected. Six reports on their pedagogical implications were presented and some of these were published in 1966 and later.

The most important contributions published in the area were:

Krzeszowski, T. P., 1966. "English Tense Expressing Verb Phrases in the Process of Teaching Polish Students". Glottodidactica, I, pp. 115-124.

Cygan, J., 1967. "English Question Structures and the Polish Learner". Glottodidactica, II, pp. 85-93.

In December 1967 the research team consisted of twenty-one linguists (from Poznań - 10, Łódź - 3, Warsaw - 6, Wroclaw - 2). It was accepted then that the transformational-generative model would be employed in our contrastive project from that moment on, with the proviso that the two most advanced pilot projects would be continued and completed within a structural framework.

With three years of research experience in contrastive studies we decided that the POZNAN POLISH-ENGLISH CONTRASTIVE PROJECT should become a ten-year project consisting of the following three stages:

1. 1968 - 1970:	a continuation of organized intensive research in various aspects of Polish-English contrastive grammar (phonology and syntax).
2. 1971 - 1973:	a continuation of intensive organized research (phonology, syntax and semantics) and the preparation of a three-volume Polish-English contrastive grammar, both theoretical and applied.
3. 1974 - 1977:	publication of the above-mentioned work and the preparation and publication of teaching materials.

It should be noted however that Stage 3 does not exclude further research on certain theoretical problems nor is the preparation of teaching materials (e.g., phonetics) excluded from Stage 2.

At the present time the project is being directed by three members of the Institute of English at the University of Poznań. Dr. Jacek Fisiak, Director of the Institute, has been serving as director of the whole project since 1965. Since 1967 Dr. Kazimierz Polański has been responsible for the Polish language section, while Dr. Waldemar Marton has been in charge of the applied linguistics section for the past two years.

During the first stage of our project research efforts have been concentrated on monographs (doctoral dissertations) covering wider areas of Polish-English contrastive grammar as well as on reports discussing various issues concerning general theoretical contrastive studies. The following doctoral dissertations have been completed since 1968 or are about to be completed:

(1.) Marton, W., 1968. Noun Modification in English and Polish. Unpubl. (Dr. Jacek Fisiak supervisor)

(2.) Kopczyński, A., 1968. English and Polish Consonant Phonemes. Unpubl. (Dr. J. Fisiak supervisor)

(3.) Arabski, J. (in progress) Infinitival Constructions in English and Polish. (Dr. J. Fisiak supervisor)

(4.) Bartnicki, S. (in progress) The Order of Direct and Indirect Object in English and Polish. (Dr. J. Fisiak supervisor)

(5.) Kuszyński, A. (in progress) Adverbs of Place, Time and Manner in English and Polish. (Dr. J. Fisiak supervisor)

(6.) Jakubczak, I. (in progress) Relative Clauses in English and Polish. (Dr. K. Polański supervisor)

(7.) Majchrzak, K. (in progress) Fraza nominalna w języku angielskim i polskim (The Noun Phrase in English and Polish). (Dr. K. Polański supervisor)

(8.) Grala, M. (in progress) Participial Constructions in English and Polish. (Dr. K. Polański supervisor)

(9.) Olekey, W. (in progress) Interrogative Constructions in English and Polish. (Dr. K. Polański supervisor)

(10.) Zybert, J. (in progress) English and Polish Vowels in Contact. (Dr. J. Fisiak supervisor)

(11.) Morel, A. (in progress) Verb Complementation in English and Polish. (Dr. K. Polański supervisor)

Several works concerning the theoretical aspects of contrastive studies have been presented at seminars and conferences. The most important of them to date have been:

(1.) Krzeszowski, T.P., 1968. "The Place of Contrastive Studies in Modern Linguistics". Unpubl.

(2.) Marton, W., 1968. "Transformational Contrastive Studies: Some Methodological Remarks". Unpubl.

(3.) Marton, W., 1968. "Equivalence and Congruence in Transformational Contrastive Studies". Studia Anglica Posnaniensia, I, pp. 53 - 62.

(4.) Fisiak, J., 1968. "Phonological Contrastive Studies: Methodological Considerations". Unpubl.

(5.) Marton, W., 1969. "English and Polish Nominal Compounds: A Transformational Contrastive Study". Studia Anglica Posnaniensia, II, pp.59 - 72.

(6.) Fisiak, J., 1970. "The Case Grammar and Contrastive Studies". Unpubl.

The analysis of English errors made by Polish students was included additionally in our project in 1967. A report on the subject was presented and subsequently published (Arabski, J., 1968. "A Linguistic Analysis of English Composition Errors Made by Polish Students". Studia Anglica Posnaniensia, I, pp. 71 - 89). An extensive monograph and further studies should appear in print between 1972 and 1975.

In 1967 we began to assemble our own corpus of English and semantically corresponding Polish sentences on punch cards. The sentences were taken from novels, magazines and scientific works. In 1969 the corpus consisted of 100,000 English sentences and approximately the same number of Polish sentences. The corpus is considered only as an aid to our research workers and has been used by them since 1968.

This year the encoding of information concerning both English and Polish has been initiated and should be completed by the end of 1971. This will make the information concerning various aspects of the structure of English and Polish more easily accessible. Our corpus, however, is not designed for computer processing.

Since 1968 a Polish language corpus gathered in Katowice has also been at our disposal and has frequently been used by our project participants. We would like to point out that at present we do not foresee any possibility of using computers in our project.

The project has been subsidized since 1965 only by limited funds from the University of Poznan, and this in turn has by and large determined the scope and progress of the research which has been undertaken.

In the autumn of 1969 the Ford Foundation expressed some interest in contributing to the financing of the project through the Center for Applied Linguistics, and consequently preliminary negotiations were held last spring and summer in Washington, D.C. between Dr. J. Lotz, Dr. W. Nemser, Dr. Hood Roberts and Dr. J. Fisiak.

Assuming that the collaboration between the Center for Applied Linguistics and Poznań will begin on January 1, 1971, and we hope it will, our project should develop further and should include even more research workers from other institutions than heretofore. This, of course, will require a restructuring of our organization and planning.

Cooperation with the Center for Applied Linguistics during Stage 2 of our project will help us to complete the contrastive grammar of English and Polish, both theoretical and applied, much more quickly and thoroughly than originally expected. This, of course, will

automatically speed up the preparation of teaching materials.

In order to handle the new situation successfully a conference of all prospective collaborators including the participation of Dr. W. Nemser of the Center for Applied Linguistics will be held at Karpacz between December 17 and 19, 1970. During this conference five research teams will be organized composed of members from Poznań, Wroclaw, Warsaw, Cracow and Lódź; and these centers will in turn conduct research in their assigned areas with Poznań as the administration and coordination center.

As has already been pointed out, the results of individual research presented in monographs, papers and reports will be summarized in three major volumes which will then form the basis for further publications in the area of applied Polish-English contrastive studies and teaching materials. We plan to publish three volumes as follows:

(1.) J. Fisiak, K. Polański, A. Kopczyński. The Sounds of English and Polish. (1973)

(2.) K. Polański, J. Fisiak, W. Marton. The Syntax of English and Polish. (1974)

(3.) K. Polański, S. Karolak. The Lexicon of English and Polish. (ca. 1975)

The publication of the following handbooks should be possible from 1972 onward:

(1.) J. Arabski. A Manual of Polish Phonetics for English Speakers. (1974)

(2.) H. Grabińska. Language Laboratory Manual of English Phonetics for Polish Students (1972/73)

(3.) W. Marton et al. The Syntactic Structures of English. Five volumes. Volume I (1975)

(4.) K. Polański. A Comprehensive Polish Grammar for Speakers of English (1973?)

Other materials and tests will later be based on the theoretical results obtained from our research. Thus, summing up this brief account of the Poznań Polish-English Contrastive Project, let me point out that in our opinion the project has both theoretical linguistics values as well as pedagogical and can contribute just as other similar projects have to a better understanding of language, its nature and use.

DISCUSSION was opened by the Chairman, Dr. Leonardo Spalatin (Zagreb).

R. Bugarski asked whether the Polish project did not foresee using computers because no computers were available or because it did not believe in their use.

J. Fisiak: Because the only ones available are not suitable.

R. Filipović asked about the Polish and English corpuses mentioned.

J. Fisiak: These are two independent corpora. Our corpus in Poznań has 100,000 English sentences and their Polish equivalents on hand-sort punch cards, with about 240 items of information encoded (two sides of the card for Polish and two for English). The same procedure is used with the Polish language corpus, which is larger, covers Polish only, and is used mainly by people at the new University of Silesia in Katowice for M.A. theses and two or three Ph. D. dissertations. However, it is consulted by our researchers; they can go to Katowice to use it. It is not a computer corpus.

R. Filipović: But you never considered having two corpuses, one English translated into Polish and the other Polish translated into English?

J. Fisiak: No, not at the moment.

R. Filipović, impressed by the work mentioned, asked about getting copies.

J. Fisiak: Dissertations can be microfilmed and articles xeroxed. We hope to publish some papers next year.

J. Hegedüs asked about other aids to researchers besides the corpus.

J. Fisiak: Researchers can look for other materials outside the corpus, for instance if it furnishes only a few examples of a problem. The corpus is

not an end in itself. Since we adopt the transformational-generative model, there is full justification for this. We don't want to give a contrastive grammar based on one particular corpus, 2,000,000 or 4,000,000 sentences or something like that.

J. Hegedüs: Did you assemble this corpus at random or according to some principles?

J. Fisiak: At random. 60% of it is novels containing a large proportion of conversation; also newspapers, magazines, scientific prose, textbooks, written 1939-1968.

D. Chiţoran: You refer to an analysis of English errors made by Polish students which was included in the project in 1967. Would you enlarge a little on its scope and purpose?

J. Fisiak: First the aim was practical. We collected the errors from university entrance exams, to make exercises to eliminate the errors later and also to point out some difficult points to secondary school teachers. Later, Mr. Arabski got interested in finding linguistic explanations for the errors as far as possible, and he has been working on a Habilitationsschrift to appear in 1972-73 and some articles. He will have a small team working with him. We also want to use materials from other centres. Of course, mistakes of teachers also show up in the students, and so the analysis of mistakes is complex and should include sociolinguistic and other aspects. This is also in a sense a reply to Pitt-Corder's lecture in Poznań in 1966, where he attacked contrastive studies and pointed out that a more important things should be discussed and analyzed first - the problem of errors.

R. Filipović mentioned that summaries of the three Zagreb M. A. theses were to be published.

J. Fisiak answering J. Hegedüs's question: two sets of three-volume grammars are planned. The purely theoretical volume in phonology, for example, will discuss the phonology of English and Polish in terms of a late Chomsky-Halle model as modified slightly by Vanderslice and others; but the applied volume will operate only with the surface phonetic representation and will be something more resembling a structural phonology. (But we do not say structural, because definitions in structural theory are limited to a single language.) It will not be a phonetics of English for Polish students with exercises; but it can be used for further pedagogical application, e.g. construction of exercises, and as a sort of references.

The collaborators on the two series will not always be the same people.

E. König commented that some problems require a corpus, such as those involving norm vs. system (Coseriu). For instance, in English the topic of a sentence very often coincides with the subject, which is not so in German; but this is a case of more or less, rather than either-or.

J. Fisiak agreed that the corpus is a help in some cases; but other cases do not require it. We feel typological linguistics, the theoretical side of our work, is as important as the practical side.

V. Ivir asked about the possibility of using a semantic approach: seeing how particular meanings were expressed in two languages. This might be worth trying in an extensive project.

J. Fisiak: We have not done any serious work in semantics primarily because semantics itself has not developed to the extent phonology and syntax

have. At our conference on semantics (Bellert etc.) we decided that the state of the art is far from satisfactory; more theoretical work has to be done. But we have a limited number of people, and they cannot all do general linguistics. General linguistics should provide us with some theory and models to test.

V. Ivir: On what basis did you segment your fields? You have one title "Noun Modification in English and Polish" and another "Adverbs of Place, Time and Manner". These seem to be two different kinds of things: in one situation processes like modification or relativization, in the other structures. Did you make a list of subjects beforehand?

J. Fisiak: Some topics came from people's dissertations, but a list has been made (Polański, Marton, Fisiak). Some will even repeat work that has been mentioned, to fill gaps. There will be four centres: Poznań (and Wrocław), Kraków, Warsaw, and Łódź, each with general, English, and Polish linguistics. In general the project is supervised by myself, and Dr. Polański is responsible for the Polish side. Dr. Marton is responsible for the applied side, pedagogical implications, applications, and so on.

The discussion was closed by the Chairman.

Jozsef Hegedüs (Budapest, Hungary)

TWO QUESTIONS OF ENGLISH-HUNGARIAN CONTRASTIVE STUDIES[1]

1. Some Theoretical Considerations

1.1. The contrastive analysis of two languages represents an extremely wide area of confrontations arising from the wide range of linguistic phenomena both on the surface and in depth. It is no wonder therefore that, as Professor Rudolf Filipović has pointed out, "...there is not, as yet, one special method that can be used for the contrastive analysis of two languages. Quite the opposite; various methods and linguistic approaches may be adequate for contrastive analysis."[2]

The area of studies to be covered being so wide, it is quite obvious that neither the special viewpoints of psycholinguistics as proposed by Tatiana Slama-Cazacu[3] and of second language acquisition emphasised by Dr. Dumitru Chiţoran[4] nor the application of a generative approach propounded by Gerhard Nickel[5] and Ekkehard König[6] should be lost sight of. This approach, the transformational generative model for contrastive analysis, has been adopted by the Polish contrastive researchers led by Professor Jacek Fisiak.[7] At the same time, however, it seems obvious that structural approach, too, must be involved in a full-length analysis.[8]

As to the ultimate goal of contrastive analysis, it is impossible not to agree with R. Filipović that, "The goal of contrastive linguistics is a contrastive grammar of the languages under study."[9] Naturally, the theoretical and practical difficulties of constructing such a grammar do not look simple. Eric P. Hamp speculates with good reason about

the type of grammar to be chosen for this purpose: "...I am not entirely sure that I really understand what constrastive grammar is supposed to be. It seems to me that in many ways this remains yet to be defined, or rather explicated."[10] But however dark the prospects for a definition may seem to be, one aspect of the issue appears to be clear: "Such a grammar", Rudolf Filipović says, "represents something new in linguistics, and also meets a long-felt practical need. The results of research on a contrastive grammar, therefore, may be significant enough to represent a contribution to linguistic theory and not just to linguistic practice (applied linguistics)."[11]

1.2. When speculating about a proper working theory, one should not leave the typological structure out of consideration. English belongs to the Indoeuropean languages, whereas Hungarian is an offshoot of the Uralic-Altaic group of languages. Another fact also should not be neglected: it is the geographic distance or proximity. It must be due to geographic proximity that languages like German, Slavic, Roumanian are semantically much closer to Hungarian than English.

Considering that English semantic relations are highly problematic for Hungarians learning English, great attention should be paid to what may be called a 'contrastive semantics'. As English-Hungarian contrastive semantics is still a largely untapped area, we have no beaten track to follow. The state of things being as it is, I see no harm in proposing for discussion a tentative idea of why certain phenomena of the English language are so difficult for Hungarians.

1.3. Let us assume that anything meant or thought of or spoken about has a firm conceptual (or conceptional) basis somewhere in the mind. Let us assume further that this basis serves as a certain 'last refuge' that we can have recourse to when wanting to understand, say, a notionally complicated sentence or to analyse it. By understanding a sentence we mean (or at least we may mean) a general ability to reduce

the contents of a sentence to its basic, that is, to its most generalized semantic constituents. For instance, in this sentence

> 'A fox had slipped across the grass from the edge of the plantation on the hillside.'[12]

the action expressed by the verb can be generalized like

> ... had slipped ⟶ moved

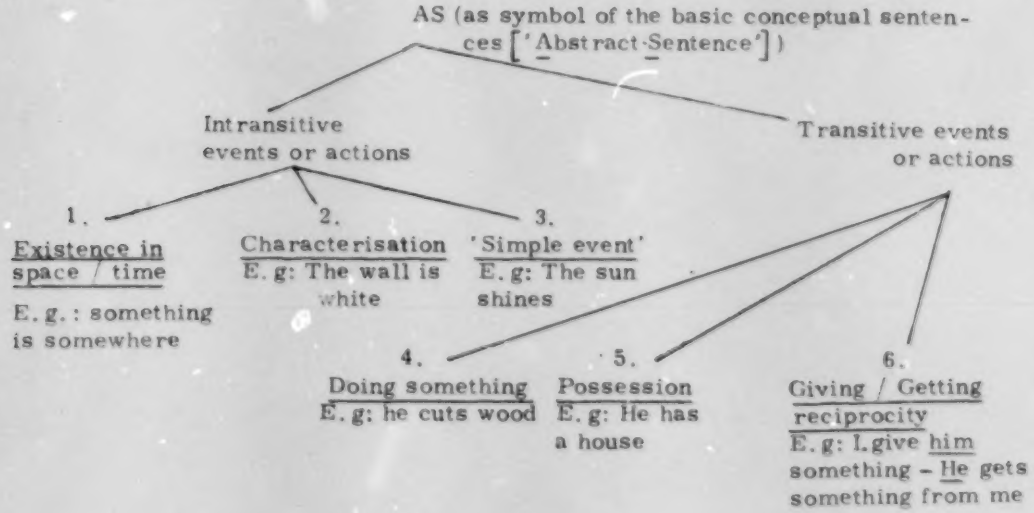
because to move is more general than to slip. The most general substitution for had slipped, however, is did in this particular sentence. Thus the ultimate generalization of the whole sentence is: something did something somewhere.

If we look at this generalized meaning from a very abstract point of view we can deduce an abstraction something like this:

$$a - R_{tr} - b - L$$

(where a stands for 'something', b stands also for 'something' but not identical with the 'something' of a; VR_{tr} is a symbolic transitive action and L ('locus') is short for 'somewhere')[13]

1.4. The conceptual basis (or the generalized contents of sentences) may consist of about six main groups. The groups could be represented in a tree-like form:


AS (as symbol of the basic conceptual sentences ['Abstract-Sentence'])
Intransitive events or actions
Transitive events or actions
1. Existence in space / time
E. g.: something is somewhere
2. Characterisation
E. g: The wall is white
3. 'Simple event'
E. g: The sun shines
4. Doing something
E. g: he cuts wood
5. Possession
E. g: He has a house
6. Giving / Getting reciprocity
E. g: I give him something – He gets something from me

The idea being tentative, it does not seriously matter whether there are six or more or less basic conceptual sentences.

There can be several sub-groups in the main ones like

(1) Existence in space/time with its possible sub-groups:

a) Expression of existence
Man exists
I live
etc.

b) Local existence
Something is somewhere
There is a pen on the floor
etc.

c) Temporal existence
Once there was a king...
The war lasted 6 years
etc.

(2) Characterisation and its possible sub-groups:

a) 'Definite'
A cat is a mammal
Mr. Brown is pale

b) 'Indefinite'
The rose there seem red
Mr. Brown looks pale

c) 'Changing' characterization
The leaves turn yellow
He has become an engineer

(As a matter of fact, these last examples are disputable. For instance the sentence He has become an engineer may have two basic conceptional sentences:

(1) He was not an engineer

(2) (Now) he is an engineer

Naturally, this particular sentence can be considered as having a 'latent' negation in the deep structure. This must be a question of general linguistics. The sentence has, however, a 'contrastive' aspect,

too, because for Hungarians - deep-structurally or in any other way you like - there are two questions coming up:

(1) The question of the Present Perfect which is usually understood by Hungarians as an addition of Present + Past, the Present being the dominant time-factor;

(2) The question of negation related to deep structure. For the time being these issues in ensemble are very difficult to solve.)

d) Necessity, possibility, etc.
It is necessary to learn
etc., etc.

I think these examples are enough to show what is meant by basic conceptual sentences in this paper.

There can be altogether 27 sub-groups, the richest being point 4 ('Doing something').

1.5. Now, if asked what the use of all this abstract mental game is, the answer is that

(1) the stock of the basic conceptual sentences represents a fundamental minimum vocabulary and the essentials of some sort of sentence-patterns;

(2) this stock enables us to get a deeper insight into the contrastive relations between Hungarian and English. Let us see some examples:

a) In my opinion, for instance, there is a twofold difference between the English It is cold and the Hungarian Hideg van. One of the differences is that of the surface:

English	Hungarian
It is cold	'Cold is' (Hideg van)

The other difference is that while the English statement belongs conceptually to the notion of characterization, the Hungarian one is

connected with the idea of existence ('cold is' ⟶ 'cold exists at present'). Namely, if we assume that each of the generalized ultimate sentences have a definite and psychologically ingrained place somewhere in the mind - and at present we have no reason to deny the possibility of the existence of such brain mechanism - then we may also assume that whereas certain basic conceptual sentences have the same psychological place ('engram') in the mind for both speakers of English and Hungarian, certain ones have different 'conceptual' places. I am thus of the opinion that the most difficult items in a foreign language are those that have different surface structures and different 'conceptual' ingrained places at the same time.

b) Let us take another rather simple-looking example.

In the so-called 'doing something' (point 4 in the tree-like symbolisation) we can find the causative actions. E.g:

Hungarian	English
(Ők) felépittetnek egy házat	They have a house built

In connection with these examples I think that there is a strange 'contradiction' between them. First, as to the surface form the English causative sentence is more intricate than the Hungarian one (which among other things [but not solely] accounts for its being so difficult for Hungarians learning English). Secondly, looking into the deeper relations, the simple-looking Hungarian causative proves to be highly complex. The internal complexity could be explained in this way:

Let us symbolize a definite group of Hungarian verbs with V_x, (meghagyni=to let, to bid; elrendelni=to order; megparancsolni= to command, etc., etc.). The persons (agents) taking part can be symbolized with a and b respectively.

At the beginning of the derivational chain two separate sentences have to be taken into account:

(1) $N^a_{nom} + V_x + N^b_{dat} + N_{acc}$ (Ők[a] megparancsoltak nekik[b] valamit = They[a] ordered them[b] to do something)

(2) $N^b_{nom} + V + N_{acc}$ (Ők[b] felépitenek egy házat = They[b] are going to build a house)

The first rewrite-rule contains an imperative element (V_{imp}) in the second sentence:

(1) $N^a_{nom} + V_x + N^b_{dat} + N_{acc}$ (Ők[b] megparancsoltak nekik[b] valamit = They[a] ordered them[b] to do something)

(2) $N^b_{nom} + V_{imp} + N_{acc}$ (Ők[b] építsenek fel egy házat = They[b] should build a house)

The two sentences are conjoined: (C = conjunction)

$N^a_{nom} + V_x + N^b_{dat} + C + N^b_{nom} + V_{imp} + N_{acc}$ (Ők[a] megparancsoltak nekik[b], hogy ők[b] épitsenek fel egy házat = They[a] ordered them[b] that they[b] should build a house)

Now the decisive rewriting takes place with nominalization where V_x, V and a new element: N_{gen} (noun in genitive form) must be revalued as V_{caus} (causative Verb) and the persons are deleted (a, b):

$N_{nom} + V_x + N_{gen} + N_{acc}$ (Ők megparancsoltak a ház felépitését = They ordered the building of the house)

$\downarrow$

$N_{nom} + V_{caus} + N_{acc}$ (Ők felépittetnek egy házat = They have a house built)

As far as I can judge correctly, the derivation of the English causative construction (at least with to have) seems much simpler.

In a simplified representation:

(1) They[a] have a house
(2) They[b] have built a house

} (1) They[a] have a house
(2) They[b] have built a house } They have a house built

With these few comparative examples concerning the so-called basic conceptual sentences I only tried to point out that in my opinion even on this kind of deep level comparison there seem to exist rather wide discrepancies between Hungarian and English. Naturally, I do not have the right to say that such discrepancies should necessarily have general validity in regard to other languages.

2. Some basic features of English contrasted with Hungarian; questions of nouns and 'nominality'[14]

Introductory notes. Generally speaking, the basic deviation of the Hungarian language from English lies in the fact that English is of far more nominal character than Hungarian. If we look at the Hungarian language from the visual angle of the structure of English, the Hungarian gives the impression of being a 'verbal' language.

This statement is not merely a theoretical one; it is based on an error analysis begun in 1967. 300 adult Hungarian learners of English with very different social positions were tested. It came to light that approximately two-thirds of all the errors made were connected with nominals.

This part of the paper is to give a very short outline of the English noun and nominal constructions that are differently structured or used from the viewpoint of Hungarian.

2.1. Pluralizing nouns.

In contrast with English, in Hungarian the singular is used after quantifiers and numerals:

Hungarian		English
egy ház	=	a (one) house
sok ház	=	many houses, a lot of houses
öt ház	=	five houses

It is interesting to note that in Hungarian there is a very simple opposition between plural and singular. The opposition consists in whether something meant is one or more than one. (Professor John Lotz has stated that Hungarian distinguishes between "a number defined by its oneness or its numeric attribute" and "muchness undefined"[15].)

In Hungarian nouns in plural form (apart from a very restricted number of exceptions) have only 'plural' meaning - a meaning characterized by the above "muchness undefined".

Singular	Plural
szék (chair)	székek (chairs)
kutya (dog)	kutyák (dogs), etc.

In contrast with Hungarian, however, a great number of English plural forms do not have the same meaning as they have in the singular (as far as their translation into Hungarian is concerned) E.g.:

Singular	Plural
custom (=szokás)	customs (=vám)
spirit (=szellem)	spirits (=szeszes ital, kedélyállapot)
effect (=hatás)	effects (=ingóság), etc, etc.

So pluralizing nouns taken from a practical point of view is not a simple question at all for a Hungarian learning English. Most of the mistakes made are centred around two main problems:(1) he or she usually says or writes many /much book, two table, three big window, etc.; (2) he or she tends to use plural forms such as funds, damages, sands, provisions, irons, advices, manners, etc. as if they had the same meaning as in singular.

2.2. Genitive

2.2.1. With two formal ways of expressing the Genitive (of, 's), there are many genitive combinations in English that do not yield equivalents in Hungarian in many cases. The examples given below

only point out some of the formal differences:

(1) She must go to the butcher's

A henteshez kell mennie
(There is no such genitive form in Hungarian)

(2) He has the habit of getting up very early

Az a szokása, hogy nagyon korán kel
(In Hungarian subordinate clause is used)

(3) A wild beauty of its own

Sajátosan vad szépség
('Sajátosan' is an adverb)

2.2.2. In certain cases we can find symmetrical correspondences in superposed genitive constructions. E.g:

(1) Conservation of the health and vitality of the teeth that support the bridge is imperative.

A hidat támasztó fogak egészségének és vitalitásának megőrzése nagyon fontos.

English

N	of	N
N		N

Hungarian

$N_{(gen)}$	N_{gen}	N_{gen}
	N_{gen}	

($N_{(gen)}$ = latent genitive)

(2) Teachers of English for beginners of about ten years old need to be familiar with contemporary English.

Jól kell ismerniük a modern angol nyelvet azoknak az angol nyelvtanároknak, akik körülbelül tiz éves koru kezdőket tanitanak (angolra).

In English the structural arrangement of the above sentence looks like this:

N + pr + N

N + pr + N

N + pr + N (pr=preposition)

(i.e. Teachers of English

English for beginners

beginners of about ten years old)

There is no such constituent formation in Hungarian, at least not in such a 'rigid' structural type.

2.3. Definite and indefinite articles

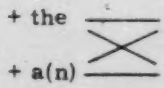
2.3.1. It can be assumed tentatively that in Hungarian there is practically only one article: a/az (=the). The indefinite article (egy = a/an - one) cannot actually be called an article compared to English because of its rare occurrence on the one hand and its particular (and as yet not quite clear) syntactic role. One thing, however, seems to be fairly obvious: it cannot be a well-defined member of an opposition within tne articles similar to that of the examples here:

the pen	- a pen
(das Buch	- ein Buch
le livre	- un livre)

So the definite article in Hungarian constitutes a one-sided opposition:

a(z) - ∅ (zero article)

Independent of whether it is true or false in itself, the English articles contrasted with Hungarian seem to constitute a system-like opposition:



(+ = positive, - = zero)

As English usage of articles is in close connection with the notion of countability and uncountability (which is not characteristic of Hungarian), Hungarians learning English are, as a matter of fact, faced with a double difficulty (1. the articles themselves, 2. lack of

countables and uncountables in the Hungarian language).

2.3.2. It is most remarkable that although the frequency of English nouns in any text is higher than that in Hungarian (from 10 to 20%), the frequency of the definite article is considerably lower (10 - 15%) than that of the Hungarian definite article. Only the definite and indefinite articles taken all together are more or less equal (or at least slightly more) to the frequency of the Hungarian definite article.

2.3.3. Still more problematic is the case with articles combined with determiners. It would be boring to list even a small percentage of the difficulties leading to a great amount of errors made by Hungarians; instead I only wish to say that among the most difficult constructions for Hungarians we find combinations with determiners+prepositions (e.g.: I want to keep this a secret) or: determiners+prepositions+articles (e.g: He isn't much of a man).

2.4. Nominal constructions in the VP (Predicate) structure - V+N structures

2.4.1. The overwhelming majority of English predicate structures problematic for Hungarians are essentially of nominal character. This statement means - among others - that whereas in English it is quite 'natural' to attach to a single transitive (or even intransitive) verb a chain of elements sufficient for constructing another sentence, in Hungarian a subordinate clause is usually used. In other words, it belongs to the very nature of English sentence-structure that nouns (and pronouns) can be substituted for sentence-like infinitive or gerundial forms, like for instance:

(1) I know him

(2) I know him to be a liar
(I.e: I know him — He is a liar)

In Hungarian:

(1) (Én) ismerem őt

(2) (Én) tudom, hogy (ő) hazug

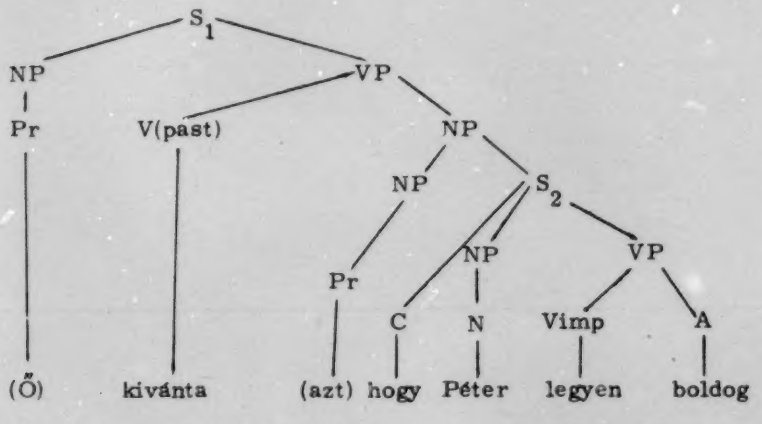
(='(I) know that (he) liar')

So in Hungarian the type I know him to be a liar requires two sentences: a main clause and a subordinate one.

Another example:

He wished for Peter to be happy

Represented in a tree-like form, the translation into Hungarian of the above sentence has approximately the following form:



i.e. (Azt) kivánta, hogy Péter boldog legyen (='He wished that Peter be happy')

(Pr=pronoun, C=conjunction, imp=imperative)

Generally the same solution given is needed when trying to translate the following patterns into Hungarian:

(1) I want him to post the parcel

(2) I want the work finished quickly

(3) I saw him cross the road

(4) I like people to tell the truth

(5) She likes to be given presents

(6) He made no attempt to deny

(7) I leave it to him to fix the date

(8) I know how to do it

(9) The police knew the murderer to be hidden in the forest

(10) He demanded to know the truth

(11) He arrived to find his wife gone

(12) He seems to be clever

(13) We don't want there to be another war

(14) Please excuse me coming late

(15) He doesn't remember ever seeing me

(16) I wished to see this realized

(17) The student was to come back as soon as possible

(18) He was to have come back soon

(19) His intention was to sign the contract

(20) His plan to start early was splendid

(21) John was anxious for Mary to start early

(22) Mary is a pleasant woman to talk to

(23) He is strong enough to carry the box

(24) She is too tired to do such a hard work

(25) Bill is ashamed of being laughed at

(26) There is no point in selling the goods

(27) There is no one here to speak to

(28) It is nice of you to say so

(29) It is time the child went to bed

(30) It is no good behaving like that

(31) He is said to know several foreign languages

(etc., etc.)

Naturally, a good many of the English sentences listed above can have two sentences (say, 'kernels') in the base, so there is some similarity between the two languages. But whereas English can fuse the two base-sentences on the surface, in Hungarian - in a very large number of cases - this fusion is not allowed. So in Hungarian the base-sentences are very similar to their realization on the surface. The fusion in English of two sentences from the base results in a direct nominal construction. By 'direct' I mean that the set of elements framing a nominal phrase do not need a special conjoining element as is the case in Hungarian.

2.4.2. In connection with this kind of nominality, mention should be yet made of a very special way of constructing nominal phrases in English. This is the case when a preposition governs (or refers to) a whole sentence introduced with a wh-word:

(1) Mary is ignorant of what they may think of her

(2) In what follows he is going to give some more details

The Hungarians' usual way of making 'preposition-governed' nominal phrases would be:

(1) Mary is ignorant of it that what they may think of her

(2) In it (or: in that) what follows he is going to...

2.4.3. Also mention ought to be made of the extremely rich variety of special nominal phrases that the English language abounds in, the types of which could be illustrated with such examples as

to have breakfast

to have a look at something

to take a walk

to be in need of something

to be indicative of something

etc., etc.

The vast majority of such phrases correspond to one-verb forms in Hungarian. So whereas to have breakfast is a pure nominal construction in English, the Hungarian counterpart (reggelizni or megreggelizni) is not nominal; it is, let us say, a simple intransitive verb widely different in usage from the English one. The difference outlined here is not only a mere structural one; that is to say, the difference is not restricted to the surface stucture but is also in the conceptual relations touched upon in 1.3. and 1.4. Accordingly, the above phrase (to have breakfast) has a two-fold difference when(and exlusively when) contrasted with the counterpart in such a language as Hungarian:

to have breakfast — (1) structural difference
to have breakfast — (2) conceptual difference

The conceptual difference means simply that the verb 'reggelizni' in the Hungarian linguistic mind coincides with the general notion of a simple intransitive action while the English 'to have breakfast' carries some sort of possessive shade of meaning.

2.5. Nominal sequences in sentences

2.5.1. In English there is a great variety of 'unintermitted' chains of nominals consisting mostly of nouns, participles, gerunds, infinitives. By 'unintermitted' I only mean a contrastive feature, namely in Hungarian such nominal phrases as follows are usually split up into clauses (main clause + subordinate clause):

Our attempts to state his identity have failed;

The excitement of making a deal in front of the MP hut added to his well-being;

Given a class of primary school children about to start learning, or rather using, English, the teacher's aim is twofold...

etc., etc.

2.5.2. In a great number of cases some phrase-constituents in English sentences can be considered as 'broken' (intermitted) in comparison to possible Hungarian counterparts where the same sequence of phrase-constituents can be called 'strictly consecutive'.

Syntactically it is the case when two (occasionally three) nominal phrases are attached to a single noun:

"It describes the development at Indiana University of a completely self-instructional course."

The nominal phrase-constituents attached to development are:

... development
- (1) of a completely self-instructional course
- (2) at Indiana University

((1)='main' constituent, (2)= constituent of secondary importance)

The sentence translated into Hungarian gives a consecutive chain of constituents:

... tanfolyam kifejlesztését az Indiana Egyetemen (the imitative 'back-translation' is: '... the course's development at the Indiana University').

From the viewpoint of Hungarian syntax the same analysis is approximately valid for the following English sentence of much higher complexity:

"Grammars are attempts by linguists to describe in linguistic terms the rules according to which languages operate."

... attempts
- (1) - to describe
  - (1) - the rules...
  - (2) - in linguistic terms
- (2) - by linguists

If we translated the sentence into Hungarian we would find essentially the same consecutive arrangement touched upon above with the slight (though not unimportant) difference that certain wh-words, conjunctions, determiners combining one part of the sentence with the other would be used, like: azon (that), olyan (such), azokat (those), amelyek (which), hogy (that [as conjunction]).

With these scanty remarks on nouns and 'nominality' I hope to have been able to give some idea of some of the basic difficulties facing Hungarian adults learning English.

* * *

As is known from Dr. William Nemser's article,[16] the great bulk of Hungarian-English contrastive studies has so far been done by linguists in the USA, the initiator and leading personality being Professor John Lotz.[17] The Hungarian-English contrastive project is in a fortunate position because William Nemser, himself a native speaker of English, can help greatly in this enterprise, especially when subtleties of English have to be analyzed that are inaccessible for the non-native speakers of English in the homeland.

In Hungary the first systematic Hungarian-English contrastive studies (together with Hungarian-Russian) were begun in 1968 in the framework of typological studies led by Dr. László Dezső on the part of the Hungarian Academy of Sciences.[18] The practical field of contrastive analysis has probably had a longer though theoretically not firmly based tradition.[19]

In 1970 negotations were carried on between the Center for Applied Linguistics (William Nemser acting on behalf of CAL) and the Hungarian Academy of Sciences (represented by Professor Lajos Tamás as the Director of the Institute of Hungarian Linguistics) over a three-year project to be started in 1971. In the third quarter of 1970 three research groups were formed consisting of altogether 16 members. The

first group deals with questions of the noun, the second with the verb, the third with participles and the gerund.

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NOTES

1. A preliminary version of this paper under the title "On the Basic Linguistic Feature of Hungarian Contrasted with English (Questions of 'nominality')" was presented at the Conference.

2. "Contrastive Trends in Applied Linguistics", CONTACT (Revue officielle de la Fédération Internationale des Professeurs de Langues Vivantes) Janvier 1970. Nr. 14, p. 14.

3. Psycholinguistics and Contrastive Studies, p. 1-8. (Preprint of paper read at the Zagreb Conference on English Contrastive Projects, 7-9, December 1970)

4. A Model for Second Language Acquisition, p. 2-3 and 5-7 (Preprint of paper read at the Zagreb Conference)

5. "Contrastive Linguistics and Some Pedagogical Implitacions". CONTACT 15, pp. 18-20.

6. Transformational Grammar and Contrastive Analysis. A Report on the PAKS Project in Stuttgart, p. 1-9. (Preprint of paper read at the Zagreb Conference)

7. The Poznan Polish-English Contrastive Project, p. 1-2. (Preprint of paper read at the Zagreb Conference)

8. Vladimir Ivir: "But the approach will remain strictly formal, in the sense that structural items rather than units of meaning will serve as a starting point of analysis." Remarks of Contrastive Analysis and Translation in Rudolf Filipović, ed., B. Studies 2 (p. 23), Zagreb 1970, Institute of Linguistics.

9. The Yugoslav Serbo-Croatian - English Contrastive Project So Far, p. 2. (Preprint of paper read at the Zagreb Conference).

10. On Contrastive Contrastive Grammar. B. Studies 2, p. 3.

11. The Yugoslav Serbo-Croatian - English Contrastive Project So Far, p. 2.

12. James Gay, An Advanced English Practice Course. Longmans 1968, p. 81.

13. For some more details see: József Hegedüs, Inhalt und Übungssystem in einem Lebruch für Fachsprache. Deutsch als Fremdsprache. 7. Jahrgang. Heft 1-2/1970, pp. 78-82.

14. The importance of nominality in English is emphasised by Owen Thomas: "English is a nominalizing language. There are more operations that transform words and groups of words into noun phrases than there are similar operations for creating new members of any other part-of-speech category. These operations, in fact, permit us to create an indefinite number of noun phrases. This infinite capacity for producing noun phrases suggests that native speakers of English, perhaps intuitively, recognize the primacy of nominals in English." Transformational Grammar and the Teacher of English. Holt, Rinehart and Winston, Inc. New York, Chicago etc. 1965, p. 74.
As far as my present topic is concerned, it is a very short extract from a much longer dissertation of mine completed in 1970. Its title is: Bevezetés az angol főnév és nominális szerkesztés kontrasztiv tanulmányozásába (=Introduction to the contrastive analysis of the English noun and nominal constructions) (Unpubl.)

15. Quoted by William Nemser in his Contrastive Research on Hungarian and English in the United States. Center for Applied Linguistics. Washington, D.C. 1970, p. 1.

16. "Contrastive Linguistics at the Center for Applied Linguistics." The Linguistic Reporter, Vol. 12, Nr. 3, 1970, pp. 1-5.

17. As the then Director of the Hungarian Institute in Stockholm, John Lotz published his well-known Das ungarische Sprachsystem, Ungarisches Institute - Stockholm, 1939. The best of its kind, this grammar has ever since been a source for contrastive and general linguistic studies whenever Hungarian versus other languages was concerned.

18. Mention must be made of Dezső's detailed discussion of the Hungarian word-order in his "Einige typologische Besonderheiten der ungarischen Wortfolge" published in Acta Linguistica Academiae Scientiarum

Hungaricae tomus 18 (1-2), pp. 125-159 (1968).

19. There are a few textbooks and grammars (Russian, German, English, French, Spanish) that were published by the Department of Foreign Languages (University of Economic Sciences, Budapest) and the T.I.T. Language School (Budapest) in the first half of the sixties, essentially based on contrastive principles though with the word 'contrastive' only occasionally mentioned. My contribution is: Angol gyakorlókönyv (English Practice Book, syntactic drills for beginners and intermediate students of English) Budapest, Tankönyvkiadó, 1963 (xeroxed, 326 pages).

DISCUSSION was opened by the Chairman, Dr. Dumitru Chitoran (Bucharest)

R. Filipović asked about the statement that English is more nominal than Hungarian. The same used to be said about English and Serbo-Croatian, but is not really accurate.

J. Hegedüs answered that his personal research and opinions of other scholars confirmed his statement.

W. Browne indicated examples where Hungarian uses participles: Zágrábban lévő házam "my house being in Zagreb". If we consider participles nominal, then Hungarian is very nominal.

J. Hegedüs: Yes; but Hungarian often needs two joined sentences where English uses other constructions: cf. the example "He wished for Peter to be happy".

W. Browne observed that Hungarian (and Serbo-Croatian) should then be termed clausal languages.

R. Bugarski similarly asked about other examples claimed to be nomina in English or verbal in Hungarian, and about the concept of "notional (conceptua sentence".

E. König added that the examples cited illustrate many different process can one draw a general typological conclusion from them?

L. Dezső: As for the central point of the paper, the nominal character of Hungarian as opposed to English, it's a rather complicated question. Since this paper is based on Prof. Hegedüs's book Outline of Contrastive Grammar of Hungarian and English, perhaps we have to wait until the book is available to di this question. I feel that the situation in Hungarian and Serbo-Croatian is very similar; we have to find the different constructions where English nominal

constructions are replaced by Hungarian or Serbo-Croatian subordinate clauses, and so on. In any case, you have to refine your definition of "nominal character".

J. Hegedüs: I only said that English is of more nominal character than Hungarian, not that it is of nominal character, which would make no sense. In some instances Russian seems to be far more nominal than English. I always had in mind the comparison of Hungarian and English. In counting articles, nouns, and so on, it's remarkable that the frequency of the English noun in any text is higher than in Hungarian, it's about 10 to 20%, but the frequency of the definite article is considerably lower. The German articles turn out to be much more frequent than the English, Hungarian, French, and so on. And expressions like "to have a look at somebody", "to have breakfast" are quite unusual from the point of view of Hungarian, where a verb is used; I consider them nominal constructions. These and a great number of other examples reveal the peculiar character of English in contrast with Hungarian.

W. Browne pointed out that constructions like those Prof. Hegedüs terms "broken" exist in Hungarian: a noun and one modifier right next to it, but another modifier at some distance from it. Thus in The teacher's house in Zagreb, The teacher's directly precedes house, and in Zagreb comes directly after house; but in Hungarian a tanár Zágrábban lévő háza, first you have "the teacher's" and then "being in Zagreb" and then "the house".

In response to questions from R. Filipović and others about the organization of the Hungarian project, L. Dezső agreed to write a paper (printed below).

The discussion was closed by the Chairman.

László Dezső (Budapest, Hungary)

THE CONTRASTIVE LINGUISTIC PROJECT ON ENGLISH AND HUNGARIAN IN HUNGARY

In the lecture three questions will be discussed: 1) The situation of contrastive linguistic research on English and Hungarian in Hungary. 2. The subject matter of the project. 3) The questions of method.

1. I have no intention of enumerating the useful remarks which can be found in the English text-books. I restrict myself to one general remark: at the end of the 50's and in the 60's the increasing influence of the results of linguistics on language teaching can be observed. This was helped among other things by the development of large-scale adult teaching which demanded the conscious mastery of grammatical rules, thus focusing on grammar. The development of linguistics stimulated language teachers to formulate the rules more precisely, but this was done in a particular form according to the demands of language teaching. It was adult teaching that complied with the demand of learners (university students, specialists) to turn to the mother tongue for support. That was the starting point of contrastive research of English and Hungarian for language teaching purposes. Its first results were reflected in text-books, e.g.: the first of Joseph Hegedüs' two works, "English Textbook for Beginners", Budapest, 1963, already contained some substitutional and transformational exercises, while the other "Exercises on English Syntax", Budapest, 1963, utilized certain elements of generative grammar for language teaching purposes.

American researches, first of all those of John Lotz, inspired the English-Hungarian contrastive project. From these we could learn

how to look at our mother tongue in a somewhat different way, with the eyes of a native speaker, nevertheless from outside; to observe the phenomena of Hungarian from a more general point of view. That I think is essential in contrastive research.

At present, from this preliminary stage we enter a new phase which is still characterised by the central role of teaching, but the work has deepened and became more differentiated.

In the Foreign Language Section of the Society for the Dissemination of Scientific Knowledge (TIT) in Budapest, and the Language Department of the Karl Marx University of Economics, an error-analysis has begun, recording 300 test-papers and the papers of 100 university students of English (altogether about 48,000 lexical units have been analysed); and Joseph Hegedüs, the leader of the project has given an account of the results. The error analysis helps to find out the weak points of teaching, to determine the 'research points' in contrastive linguistics-to quote the technical term used by dialectologists. The outlines of the research tasks have been made on the basis of the linguistic error analysis: the deviations from the grammatical rules of English must be determined and contrasted with those of Hungarian.

Since the middle of the 60's, Hungarian descriptive linguistic researches have been resumed with new energy in the Institute of Linguistics of the Hungarian Academy of Sciences within the scope of the generative linguistic project. Parallel with them, typological research has also begun contrasting Hungarian not only with the Ural-Altaic languages, but also with Russian, English and Serbo-Croatian. The latter contrastive researches form a part of a larger project with the aim of preparing contrastive grammars of Hungarian and the national and world languages taught in our country. The following English-Hungarian contrastive grammatical themes have figured in the project of our

Institute since 1969:

(1) The use of articles and pronouns (Eva Stephanides, László Dezső);

(2) The question of word order and sentence structure (Joseph Hegedüs, László Dezső)

There is no need to justify the necessity of research on these two themes, but I should like to mention that errors made in the use of articles are among the most frequent.

The task of the research at the Institute is analysis of the linguistic problems, in the course of which we are going to study the literature in both languages concerning the question, as well as the most important theoretical works relating to it. Having thus acquired a solid basis, we shall collect data from parallel English and Hungarian texts, and analyse in detail the errors committed by students. The special literature, the collected data, and the error analysis together enable us to reveal the rules of language, to 'diagnose' the errors and to give advice concerning the 'therapy'. The work carried out by us is contrastive linguistic basic research which may be utilized by language teachers. As a matter of fact, the researchers are language teachers themselves who apply the result of their own researches.

In part, Joseph Hegedüs's recently finished dissertation for a doctor's degree "The basic questions of an English-Hungarian contrastive grammar" can also be considered as basic research, which, at the same time, deals with the questions of teaching methodology in detail. We should like to give a short survey of it based on the author's information. The dissertation does not deal with phonology, which has been thoroughly elaborated by the American researchers. The first part is of theoretical character and first of all examines the principle

of changeability. According to it there can be surface formal differences between the two languages but there are differences which concern both form and content. Examining the non-formal component the author sets down the fact that human communication can be reduced to 6 types: 1. existence, 2. characterisation, 3. intransitive actions, events, 4. transitive actions, 5. possessions, 6. giving-getting relation. These are expressed in the basic sentence structures with the help of morphological means, word order, etc. With these sentences 3 basic operations can be done: substitution, transformation and paraphrase, which are very important in language teaching.

In the second part of the dissertation the author states that the basic difference between English and Hungarian lies in the nominal character of English, therefore the problems of nominal phrases stand in the centre of his interest. To this question belong on the one hand the number category of nouns, the article, the pronouns, the possessive structures, the non-agreeing attributives, nominal word combinations, on the other hand the substantivization of verb constructions as infinitival, gerundial and other phrases.

The third part deals with transformations, paraphrases, and the last two parts with the concrete problems of language teaching, but we cannot give a detailed account of it here.

2. John Lotz, the Director of the Center for Applied Linguistics, Washington – who is by birth Hungarian – made a proposal to the Institute of Linguistics of the Hungarian Academy of Sciences for the establishment of a three-year common project in the field of English - Hungarian contrastive linguistic research by coordinating and developing research in progress both in America and Hungary. The Hungarian Academy of Sciences accepted the proposal and the common project is to start at the beginning of 1971 with Lajos Tamás, the Director of the

Institute of Linguistics of the Hungarian Academy of Sciences as its responsible head.

Below is the enumeration of the research themes which will be dealt with by Hungarian researchers, partly in cooperation with their American colleagues.

1. The syntax of the verbal phrase.

1.1. Basic sentence types (imperative, interrogative, negative) and constructions with auxiliaries (Edith Tettamanti, Mrs. Arthur Sibelka);

1.2. Reflexive and causative verbs, conditional (Joseph Csapó, Nicholas Eördögh);

1.3. Aspect and tense (Joseph Hegedüs);

1.4. Classification of verbs according to form and content, their syntactical types and transformations (Gizella Polgár, Joseph Hegedüs);

1.5. Transitive structures (Joseph Bognár);

1.6. The passive, impersonal constructions, the relation of verbs and non-finite forms. (Judy Aniot, Joseph Hegedüs);

Hungarian consultant: Alexander Károly.

2. Sentences with copulas and nominal predicatives and the noun phrase

2.1. Sentences with copulas and nominal predicatives (Mrs. Éva Stephanides);

2.2. The use of the article and pronouns (Éva Stephanides);

2.3. Noun attribute and adjectivized substantival attribute (László András);

Hungarian participant and consultant: László Dezső.

3. Non-finite structures and dependent clauses

3.1. Infinitival structures (George Sipöczy);

3.2. Gerundial structures (George Feniczy);

3.3. 'That' clauses (George Hell);

Hungarian consultant: László Deme.

4. Word order and sentence stress

4.1. The word order of a sentence and the problem of emphasis (Stephen Kenesei, László Dezső);

5. Phonological and morphological questions

Investigated by the American side.

Hungarian consultant: George Szépe.

6. Methodological questions of contrastive research:

Common theme.

Hungarian participants: László Dezső, Joseph Bognár

3. The methodology of contrastive research has been already mentioned above: dealing with the work in the Institute of Linguistics I spoke about the methods of linguistic research and pointed out the essential ideas of Joseph Hegedüs's dissertation from the teaching point of view. I must add that in the course of the work with the participation of the Center for Applied Linguistics the methodological questions came into the foreground, first of all the analysis of the acquisition of a foreign language both from the point of view of linguistics and that of psychology (I allude here to the paper of W. Nemser and T. Slama-Cazacu published recently and to other works). We hope the analysis of the English-Hungarian contrastive linguistic work will help us to make further progress in the method of the research. Two groups of problems are in the centre of interest: in linguistic methodology we wish to analyse the combination of typological and contrastive research; concerning teaching methods the researchers have been dealing with questions of the special pedagogical application of linguistics with significant success for a considerable time, and so there is every hope for further success in this field.

Ekkehard König (Stuttgart, Germany)

TRANSFORMATIONAL GRAMMAR AND CONTRASTIVE ANALYSIS

(A Report on the PAKS Project in Stuttgart)

It is not the aim of this 'report' to give a comprehensive and detailed survey of the organisation of our project and the work that has been done in Stuttgart during this year. There is little one could say about the organisation of our project and reports on our work are published and distributed quite regularly. Our latest report has just come out and will be distributed in the next few weeks. Instead of giving a comprehensive report I will try to discuss some general problems and questions that have come up in the course of our work, and which I hope will also be of some interest to researchers who are concerned with a contrastive analysis of languages other than English and German. The questions that will be discussed are the following:

1. What are the advantages of adopting a fully explicit model like transformational grammar as a theoretical framework for contrastive analysis?

2. Is it possible to establish a connection between various differences that can be observed between two languages? Can certain differences be regarded as reflexes of one general difference? Is it possible to draw a distinction between major and minor differences?

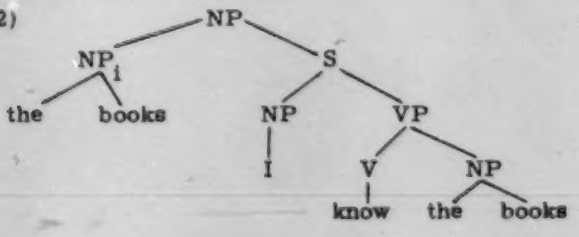
Some results of our work will be mentioned in the course of the discussion of these problems. Further information about our work can be given in the subsequent discussion.

Let us now turn to our first question. What are the advantages of adopting a fully explicit model as a theoretical framework for contrastive analysis? The dangers of a strong theoretical orientation are only too obvious. The more theoretical the orientation, the more easily one may lose sight of the practical aims one had in mind when starting contrastive research. The more sophisticated the theoretical framework, the more formidable becomes the problem of converting the results of the analysis into a format appropriate for teaching purposes. However, it seems to me that such an approach has certain advantages which probably make up for these difficulties. Nothing is gained by restating the obvious in new, transformational terminology. In many cases new insights about correspondences and differences between two languages are only possible if the full power of generative models is exploited. Certain differences between English and German can only be observed if transformational grammar is adopted as a theoretical framework for one's statements. The following statement is an example:

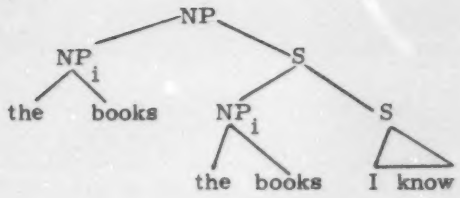
(1) Relative Clause Formation is a 'variable rule' in English while being a 'constant rule' in German.

Relative Clause Formation is the rule that moves a shared noun phrase out of a modifying clause and (Chomsky-) adjoins it to the S-node dominating that clause. This transformation converts trees like (2) into trees like (3).

(2)



(3)



The second instance of the noun phrase the books is replaced later by a relative pronoun. Ross (1967:183) states Relative Clause Formation in the following way:

(4) Relative Clause Formation:

$$W - {}_{NP}\left[NP - {}_{S}\left[X - NP - Y\right]_{S}\right]_{NP} - Z$$

SD: 1 - 2 - 3 - 4 - 5 - 6

SC: 1 - 2 4 ≠ [3 - ∅ - 5] - 6

Condition: 2 = 4

In English the scope of this rule is unboundedly large; in other words, noun phrases can be moved from far down the tree. In German the NP to be moved may only cross one clause boundary, the variable X must therefore not contain any clause boundaries. This restriction does not exist in English. Thus the following English sentences cannot be translated literally into German:

(5) There is one further element which it is useful to distinguish from the phenomena described so far.

(6) This book would be worthy of attetnion, irrespective of its merits, which it is pleasant to be able to report are considerable.

In (6) for example, the relativized NP (merits) has been moved over two clause boundaries, namely out of the extraposed clause the merits are considerable and out of the higher clause it is pleasant to be able to report S. Therefore a literal translation of this sentence into German is impossible. Using Postal's terminology (Postal, 1968) we can

characterize Relative Clause Formation as a 'variable rule' in English and as a 'constant rule' in German.

Consider now a different example of a new insight into the structural characteristics of English and German. In many cases an English subject noun phrase corresponds to a prepositional phrase in German. These prepositional phrases normally occupy the initial position in the sentence, i.e. like the English subject noun phrases they are the topic or theme of the sentence. This can be illustrated with the following examples:

(7) a. This bet won me a lot of money.

b. Mit dieser Wette gewann ich viel Geld.

(8) a. This advert will sell us a lot of dog food.

b. Mit dieser Reklame werden wir viel Hundefutter verkaufen.

Similar examples could be given for verbs like lose, obtain, gain, earn, get, buy, pay for, save, finance, etc. (cf. Rohdenburg, 1969; König and Nickel, 1970).

(9) a. This ends the post-war period.

b. Damit endet die Nachkriegszeit.

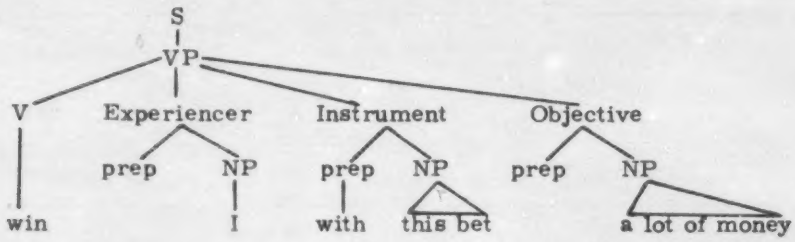
(10) a. This hardly helps our problems.

b. Damit ist unseren Problemen kaum gedient.

Similar examples could again be given for many other verbs. Many further examples of this kind can be found in the two papers mentioned above. Within the framework of transformational grammar, more specifically within that version that is normally called 'case grammar', a simple and general explanation of these correspondences and differences is possible. Within this framework the notions of 'subject' and 'object' are not relevant at the level of deep structure. The underlying structure of a sentence is represented as a sequence of verb plus a number of noun phrases. The functions that these noun phrases contract

in the sentence are marked by certain 'role' or 'case' notions such as 'Agent', 'Instrument', 'Experiencer', etc., which dominate the noun phrase and a preposition. The underlying structure of a sentence like (7) would roughly be represented in the following way (tense is neglected).

(11)



Subjects are chosen at this level of representation by a transformation which adjoins a certain NP to the S-node, deleting at the same time the case node which dominated that NP. In German only the experiencer can be chosen as subject in the corresponding phrase marker even though the Instrument may be chosen as topic. In English either the Experiencer or the Instrument can be chosen as subject in (11) and in many cases that NP is subjectivalized which is also chosen as topic. A similar explanation can be given for the other examples. Thus we can formulate the following general statement:

(12) With many verbs, 'cases' (mainly Instruments and Locatives) may be chosen as subjects in English which could never be subjectivalized in German. In most of these cases the subject is also the topic of the sentence. There is no such link between subject and topic in German.

This brings us to our second question, or rather group of questions which I repeat here for convenience:

2. Is it possible to establish a connection between various differences between two languages? Can certain differences be regarded as instances of one general, more fundamental difference? Is it thus

possible to draw a distinction between major and minor differences?

If differences and correspondences between two languages are described as differences and correspondences between rules, an affirmative answer can be given to these questions. We have already seen in the discussion of subject choice in English and German that adopting TG as framework for our contrastive analysis does not only enable us to gain new insights and make some new observations but also enables us to make general statements. Two or more apparently unrelated differences may turn out to be instances of one and the same difference when considered within this framework. Consider the following examples of differences in lexical structure in English and French.

(13) a. She swam across the river.
b. Elle traversa le fleuve en nageant.

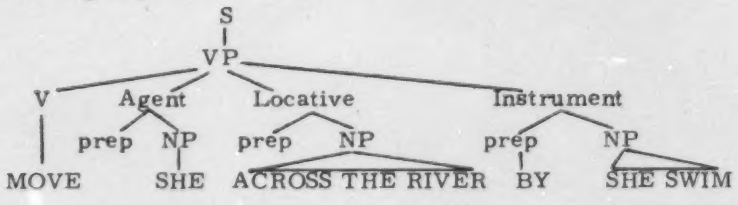
(14) a. I shook him awake.
b. Je le réveilla en le secouant.

This type of correspondence is often referred to as chassé-croisé (Tesnière, 1959:307ff).

(15) a. She dances out.
b. Elle sort en dansant.

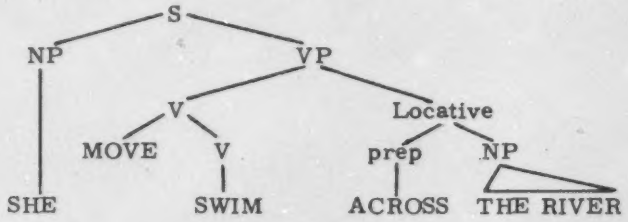
The verb dances in (15) corresponds to dansant but occupies different position relative to the element that corresponds to sort. Let us first examine examples like (13) in more detail. If we combine the suggestions that were made by Fillmore with regard to representation of functional information with those made by McCawley, Lakoff, Postal, Ross, et al. with regard to the representation of semantic structure and the operation of transformations, the underlying structure of (13) could be represented in the following way:

(16)



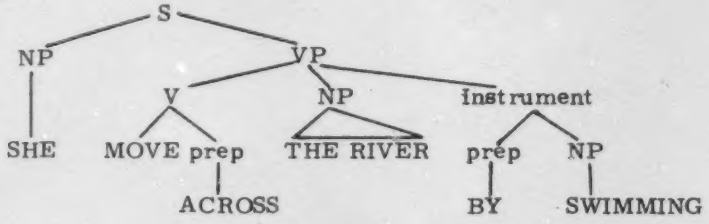
MOVE, ACROSS, and SWIM etc. in (16) are abstract, atomic predicates and prepositions which may or may not be lexicalized as move, swim, etc. in English. (16) represents the common propositional content of (13) a and (13) b. From semantic representations like (16) various surface structures can be derived in English and French by transformations and lexical insertions. First, the Agent she is chosen as subject. After subjectivalization, Equi NP Deletion deletes the noun phrase she in the embedded sentence. After this two other transformations may apply. Either the predicate of the embedded sentence is raised into the higher sentence and is (sister-) adjoined to the verb of the main sentence by predicate-lifting yielding (17) (cf. McCawley, 1968).

(17)



Or, alternatively, the preposition across is adjoined to the verb of the main clause. As a consequence of this the NP the river is made the direct object of the sentence.

(18)



In English representations can be lexicalized in the following way:

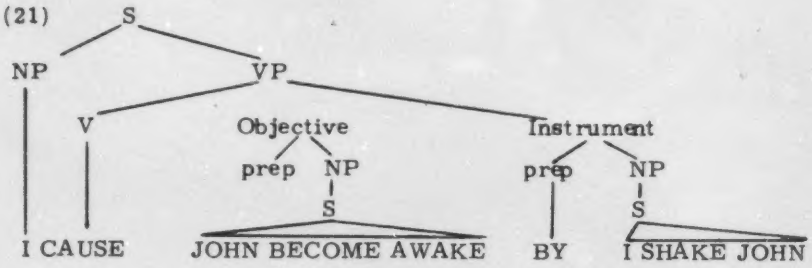
(19) She swam across the river.

Representations like (18) can be lexicalized as (20). The result is somewhat marginal in English. Constructions of this kind are more acceptable in German (20) b.

(20) a. She crossed the river by swimming.
b. Schwimmend durchquerte sie den Fluß.

In French only the second of the two transformations yields an acceptable surface structure. Apparently a predicate may not be raised out of an instrumental clause in French, at least not in many cases where this is possible in English or in German. This assumption is confirmed by examples like (14). The underlying structure of sentences like (14) could be represented as follows. Many details are again omitted. Subjects have already been chosen.

(21)



Again Equi NP Deletion applies and deletes the subject of the instrumental clause. Surface structures like (14) a are the result of predicate-lifting applied to the instrumental clause. In French it is again not permissible to lift a predicate out of an instrumental clause. Predicate-lifting can only operate on the objective clause in representations like (21). This yields sentences like (14) b. Thus two apparently unrelated differences seem to be instances of a fairly general difference of lexical structure.

My second example is slightly different. In this case a certain difference 'y' between English and German is a consequence of a difference 'x' and an identical restriction 'z'.

Within the framework of transformational grammar many types of pre-nominal modifiers are derived from underlying relative clauses, some of which are be-predications. Now, it is a well-known fact that many types of modifiers may be preposed in German which cannot be preposed in English. This is true of all participles which are associated with adjuncts of various types: Consider, for instance, the following examples:

(22) a. Ein in diesen Dingen erfahrener Mann...
b. A man (who is) experienced in these things...

Fillmore (1963:229) was probably the first to notice that preposing in English was subject to the following constraint:

> Reduced relative clauses can only be preposed, if they end in an adjective or participle.

This restriction is also valid for German. However, in German the finite verb occurs in the final position in subordinate clauses and may be preceded by non-finite verb forms. Thus all reduced relative clauses end in an adjective or participle and can therefore be preposed. There are only a few exceptions to this rule such as sentences with modal verbs. - In English complex modifiers can only be preposed after having undergone certain compounding processes which change the order of the underlying relative clause and leave a participle or adjective in final position. Examples are earthquake-plagued countries, a woman-hating man, a sinister-looking man, a fast-running man, etc. The processes that produce formations like these are subject to restrictions which do not concern us here. Formations of this kind also exist in German, e.g. gramzerfurcht, mitleiderregend, handgearbeitet, etc. There are, however, important differences between such compounds in

English and German.

a) Compounds of this kind are much more frequent in English than they are in German. Thus in many cases we find the following correspondences:

(24) a. a tree-lined avenue
b. eine von Bäumen umsäumte Strasse.

b) In German compounds like gramzerfurcht or mitleiderregend may occur both attributively and predicatively. This is not true of comparable English formations. As Bolinger (1967:6) has pointed out: "The compound adjective finds its way to the predicate only after it has become entrenched." The following formations are probably not acceptable for most speakers in predicative position:

(25) a. a woman-hating man
b. *this man is woman-hating

(26) a. a tape-tied package
b. *this package is tape-tied

(27) a. a querulous-looking woman
b. *this woman is querulous-looking

These facts as well as the differences illustrated by (22) seem to be a consequence of the well-known difference of word order in subordinate clauses in English and German. (cf. König, to appear).

Observations such as these are only possible if a contrastive analysis is carried out within the framework of a fully explicit model of linguistic description like transformational grammar.

It has already been mentioned that there are certain drawbacks to this approach. If one's theoretical framework is rather abstract and complicated, the problem of converting the findings of a contrastive analysis into a format appropriate for teaching purposes will be a difficult one. Therefore one will often feel inclined to ask whether it is worth the trouble to carry out an explicit linguistic analysis instead of giving an intuitive account of surface differences and correspondences.

Let us look at another example. It is well-known to German teachers of English that German bis may correspond to two or more lexical elements in English, viz. by and until.

(28) a. Ich werde bis Montag in England bleiben.
b. I shall stay in England until Monday.

(29) a. Ich werde bis Montag England verlassen (haben).
b. I shall leave (have left) England by Monday.[1]

By and until are not interchangeable without a change in meaning. German learners of English therefore have to be taught when to use by and when to use until as translations for bis. In order to teach the correct use of by and until the teacher might give the following instructions:

(a) If in a sentence with temporal bis the verb denotes a durative action or state, use until as translation for bis.

(30) a. Du kannst bis neun Uhr hier bleiben.
b. You can stay here until/*by nine o'clock.

(b) If the verb does not denote a durative state or action, i.e. if it denotes instantaneous action or a change of state, use by.

(31) a. Bis Montag werden die Bauarbeiter das Gebäude fertiggestellt haben.
b. The builders will have finished the building by Monday.

Let us call this approach 'Approach A'. This approach has been adopted by R. Snook (1970) in his linear programme for teaching temporal by and until. Approach A will yield the correct results in sentences like (30) and (31). However, in all those cases where by and until may occur in minimal pairs, Approach A is somewhat problematic. With the majority of verbs either by or until may occur. The resultant sentences show a clear difference of meaning.

(32) a. The pub was open until ten o'clock.
b. The pub was open by ten o'clock.

If it is claimed - as Approach A does - that by and until are in complementary distribution and therefore equivalent in meaning, one has to assume for cases like (32), that many predicates may be

polysemous with regard to their character (=Aktionsart) (cf. R. Snook, 1970). According to Snook most predicates may have either a durative or a non-durative Aktionsart. Thus the following sentence would have to be added to(a) and(b) above:

(c) Many predicates may denote either a durative or an instantaneous action or state. Analyse the predicate with regard to its Aktionsart and then apply (a) or (b).

It is easy to see that the linguistic analysis that lies behind the above instructions (a, b, c) is incorrect. In spite of this fact one might claim that Approach A is entirely satisfactory if it works, i.e. if German learners can be taught the difference between by and until on the basis of this approach.

Another possibility would be for a teacher or a grammar to give the following instructions (Approach B):

(a) Temporal bis in German can correspond to either by or until. By and until are different in meaning.

(b) If bis denotes a continuous span of time, use until.

(c) If bis does not denote a continuous span of time and if bis X can be replaced by zum Zeitpunkt X und nicht später als X (at X and not later than X), use by to translate bis.

This approach ('B') is probably more correct than 'A' and given the additional instruction that bis (zu) corresponds to English up to (33) it might be pedagogically as good as 'A'.

(33) a. Mit einer Mark kannst du bis (zu) zwanzig Minuten sprechen.
b. For one Mark you can talk up to twenty minutes.

Is it necessary and useful to carry a contrastive analysis further than this? In the case under consideration a certain difference between English and German was revealed without the aid of a sophisticated linguistic analysis. In order to give an answer to this question we must first develop a detailed linguistic analysis of by and until.

By and until differ with regard to the assertions they make as well as with regard to their presuppositions. The assertion made by

sentences like (32)a. and (32)b. can be represented by the following logical formulae (cf. König, 1970):

(34) $(\forall x)\ \underset{i \leq x \leq \text{ten o'clock}}{[\text{Past (the pub be open at x)}]}$

(35) $(\exists x)\ \underset{i \leq x \leq \text{ten o'clock}}{[\text{Past (the pub be open at x)}]}$

A representation like (34) expresses that for all time points 'x' - where x ranges between an unspecified lowest value 'i' and an upper value ten o'clock - it is true to say 'the pub was open at x'. The letter 'i' denotes the timepoint that is often introduced in sentences like (34) by the preposition from. This value is unspecified in this case. (35) expresses that there is a time point 'x' - whose lowest value could be 'i' and whose highest value could be ten o'clock - such that at 'x' it was true that the pub was open. In addition to (35) sentences like (32)b. imply that there was not a change after ten or after x if $x \neq$ ten. Thus (32)b. could be paraphrased by the following sentence:

(36) The pub was open at ten or before ten.

(32) a. implies that there was a change after ten o'clock.

By and until also differ with regard to their presuppositions. 'x until y' presupposes 'x before i', whereas 'x by y' presupposes '$\sim$x before i'. These presuppositions are the reason why by cannot co-occur with verbs like stay in sentences like the following:

(37) *Bill stayed in the garden by ten o'clock.

Until on the other hand, is not admissible in sentences whose presuppositions are contradictory to that of until. It is not only the character of the verb that matters, as the following two sentences show.

(38) *The guests from Norway arrived until 5 o'clock.

(39) Guests will arrive and leave until midnight.

Let us now consider whether this explicit description has produced any valuable result for the central aims of contrastive analysis.

First of all, one might claim that such a description is valuable qua description, even if it does not have any pedagogical implications. But this is not the only claim that can be made in this case.

An explicit analysis may also help us to decide which of two or more possible teaching strategies is more correct and more appropriate. The above description shows that Approach B is to be preferred over A. It also shows that B can still be improved further. An explicit analysis of the meaning and distribution of by and until suggests that it might be best to give the following teaching instructions to German learners with regard to the use of these two elements:

(40) If a German sentence with temporal bis y can be expanded by adding von x (from x), use until as translation for bis. If this expansion is impossible and if bis y can be replaced by (spätestens) um y (y at the latest) use by.

Whether or not one is prepared to adopt a transformational approach will probably depend ultimately on how quickly one has to present practical results and for which level of language instruction these results are envisaged. TG is probably not the right framework for a contrastive analysis that aims at inspiring language instruction at an elementary level. I, personally, have become more and more convinced that a contrastive analysis of languages as similar and as well-studied as English and German will not yield any results that are of great use at an elementary level of language teaching. The most obvious differences have always been known to teachers of the two languages. New insights can only be gained if the whole power of generative models is exploited. Therefore it seems to me that contrastive analysis is only worth doing if it is based on an explicit model of linguistic description such as TG.

NOTE

1. Some of the examples have been taken from Snook (1970).

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DISCUSSION was opened by the Chairman, Dr. Ranko Bugarski (Beograd)

M. Mikeš: Even such theoretical detailed investigations may be very useful and practical. Concerning prenominal constructions derived from relative sentence that is an intriguing topic for typological investigations. If we compare Hungarian and Serbo-Croatian, Serbo-Croatian would belong to the same type as English, not apt to make them; for example, we cannot say Vlak dolazeći iz Zagreba [train coming from Zagreb] but in Hungarian it is quite common to say Zágrábból érkezöttvonat [from-Zagreb coming train].

A. de Vincenz is not happy with two theses: that linguistics should have priority and we should inspire ourselves with linguistics for teaching, and that we should make general statements. Is König not generalizing specific cases? He would not be the first transformationalist who did. At Vincennes a group is trying to avoid this by studying all 5,000 French verbs. A case which contradicts your thesis: the type "Er vertrank sein Geld". In French you could say "Il a bu tout son argent" with the modifier tout, though I do not think one could say "Il a bu son argent". For your second example, we could easily vary the verb in No. 14: it is not possible to say "I shook him surprised" or "I shook him amused" So is not yours a specific case where you have some adverbialized verb? A third example corresponding to No. 13. Instead of en nageant one can also have an adverbial expression a la nage in French. But if you say "J'ai traversé le fleuve en calecons", in pants, I am afraid you cannot say in English "She panted across the river".

151 E. König: I did pick out a problem to see what could be done with a theoretical orientation, not meaning that this should override all other principles. Of course, I did not give all the restrictions on this pattern. In "J'ai perdu mon

argent en buvant" I took my information from Tesniere, and he does not cite yo example. But if it exists, then it corresponds to the German pattern with ver-. But I do not know whether this is an isolated example. Cf. Ich verspielte, versa all meaning "I lost my time or lost something doing this". Now, "I shook him awake" I say is a very general construction, but apparently psychological verbs are excluded.

L. Spalatin: "I boiled the egg hard".

R. Phillipson: "I bored the teachers stiff".
"I shook him sober".

T. Slama-Cazacu: Sometimes one admires something very much but can subscribe to it. I enjoyed Mr. König's lecture and found it fascinating and clear What I have noticed, however, is the lack of a demonstration of the utility of transformationalism itself.

Contrastive linguistics is, one can say, a super-theory that needs anothe theory or model to systematize the data. Many contrastive projects adopted the TG model in the beginning, and some of them have renounced it. Is it true that the project in Stuttgart has, and that Prof. Nickel has another orientation now, i.e. error analysis? A third question: is it not a contradiction when you say "TG is probably not the right framework for a contrastive analysis that aims at inspiring language instruction at an elementary level... Therefore it seems to me that contrastive analysis is only worth doing if it is based on an explicit model of linguistic description such as TG". Fourth, this question is maybe really indiscreet, you point out that your past orientation was this one. May I ask you if your present orientation is the same or not? Again a scientific problem for me because I am interested in the evolution of somebody who has done such a very nice thing and who now reverses his past orientation.

E. König: First of all I did not say that everybody should adopt this, that this was the right thing. But rather if you do base your analysis on this particula model, you can do certain things. Now, what are we doing in Stuttgart and how d I feel about this? I used to be a full-time researcher in this project; I am no lon since I joined the teaching staff, and therefore my opinions do not matter so much for the orientation of the project. As you, of course, know, Prof. Nickel thinks that in the past we were going a bit too far in theoretical orientation and there are many points where we are in disagreement. He probably would not agree with all I said today. He thinks that we should do a lot of empirical investigation, i.e. analysis of errors to give us insights where to do more research and answer problems about grading, degree of difficulty of the problem and so on. So it is probably correct to say that our project is less theoretical than it used to be. Second, I do not think there is a contradiction in the concludin remarks. I said that TG is not the right framework to inspire language teaching at an elementary stage. I added, and this of course was probably overstating my case, that I was convinced that you can do very little to inspire the elementa level from the point of view of contrastive linguistics. Therefore, because the implications for advanced teaching are more obvious, one should adopt an explicit model of linguistic investigation and one should do the kind of thing that I always relied upon so far. I think the significance of contrastive linguistics comes out more clearly at a later stage. And therefore these remarks; which I meant to be challenging, to invite comments. I would agree that there are many more aspects which are probably more important for language teaching than contrastive linguistics, particularly of the kind I was interested in. And I think that the implications of the kind of work I have been doing so far are not very easy to find; one has to speculate and try certain things. They will

probably only be apparent at a fairly advanced stage, particularly in university-level instruction.

R. Filipović: If there is a development in PAKS from the theoretical point of view, have you developed another idea about the corpus? Because if you remember, at the AILA Conference in Cambridge in 1969 when Prof. Nickel introduced my paper about our project, he pointed out that our project was the only one using a corpus, and every other project he knew of was working on a more theoretical basis without using a corpus and using just native informants.

E. König: These two problems are not connected in a way. In investigating the problem of topicalization, in order to assess the stylistic significance of this particular phenomenon of subjectivalizing certain constituents in English and in order to assess the frequency of other phenomena which I could mention if there is sufficient time, we turned to a corpus. This concerns the question of the norm, of what to do with what one calls idiomatic English, and it has to do what Levenston called underrepresentation and overindulgence. For instance, if there is a construction in English which is less like anything in German, this construction tends to be underrepresented in the English of German speakers. In order to get these phenomena which are not a question of either-or but more-or-less one has to turn to a corpus.

R. Filipović: I am very glad to hear that, because there was a period when we were strongly attacked for having chosen the method of using the corpus. We had to fight with people who did not agree with us, and at the beginning it was really quite a struggle. I am glad to hear now that even a project that was most theoretically oriented like yours has turned to a corpus also, which means that there is something in it. You were very clear yesterday when you gave us

that good example when the corpus was needed, and today I am very happy to hear that finally the corpus has been approved of by most of the projects represent here. Because as far as I know the Romanian project has got a corpus, the Polish project has got a corpus, I do not know yet much about the Hungarian, but they will probably also get a corpus, at any rate the corpus has been approved of.

D. Kalogjera: Just one minor point. "This bet won me a lot of money" is impossible to say in German in the same way and structure. "I earned a lot of money with this bet" would be I suppose acceptable in English. Did you suggest, and if you did, how did you come to the idea that this "Topic = subject" is more common in English than in German?

E. König: This is mixed up with the question that Dr. Filipović asked, because here it is a question of more-or-less, not either-or. In English you have both "This bet won me a lot of money" and "I won a lot of money with this bet", and in German you only have one of the two. And to assess the frequency and the stylistic values of the other phenomena we have to turn to a corpus.

D. Kalogjera: I would strongly support your view that there is much work to be done at a higher level, because in many universities (I talked to my friend Chiţoran from Bucharest) we are faced with people who have a reasonably good command of English but need further instruction at exactly the level that you want to apply. So I strongly support the idea that there is a place for research which aims at the students who have mastered a certain amount of English and who can say "I earned a lot of money with this bet" but perhaps would do better to take the other stylistic variant which is even more common.

E. König: May I give you another interesting example which we had to investigate by looking at the corpus. Sometimes you get the tendency in English

to make the comment, or rheme, into the direct object. For instance, sentences of the type "A tyre of the car burst": you get "The car burst a tyre", or "The river burst its banks", or "The car broke a wheel", where we have a splitting up of a complex constituent, which everybody would agree is the more basic construction, into an object and subject. It is impossible in German and I suspect it is impossible in Serbo-Croat. But to assess the frequency of this, the verbs that are possible and so on, you have to turn to informants and to the corpus. It might be more common in American than in British English.

A. de Vincenz: Do you want to say that adopting a corpus means giving up the theory? I think we are all agreed on the primacy of theory, there are some theories which are against adopting a corpus, and when you adopt a corpus you change theory but you do not give it up. Maybe Prof. Filipović could answer this question.

E. König: I do not see any contradiction between theory and corpus.

R. Filipović: Neither do I. What I really meant is that some people's point of view at the beginning of our work, let's say 1968-69, was that no corpus was needed. They were even against using a corpus, they said that a corpus would mislead them in a way, and they said that the maximum they would do would be to have native informants who would serve as a sort of "living corpus": they would check all their theoretical results on native speakers. We cannot speak about this now, but probably you will read in one of our future publications an article "Why corpus in contrastive studies?" which I have been writing now, just based on the attacks that we had to suffer against our corpus. And I am very glad that you raised that. This is exactly what I had in mind. Of course you have to have

your theory, but there are great values in the corpus for our work; the values can be of various kinds. Mr. König mentioned one yesterday, today he has mentioned another. But it will never exclude our theoretical work and our interes in theory.

B. Paetz: I am very interested to get your opinion: what kind, what type o grammatical theory, for example traditional, would you suggest for the beginners to use to be able afterwards to participate in advanced studies based on TG?

E. König: First of all one would have to be sure that one can do contrastiv work which will produce useful results at an elementary stage. And this is not so obvious, of course, because there are certain phenomena that have always been known. For instance, take the opposition between extended form and simple form which of course is another instance of the by and until problem: one form in German and two in English. Or some and any. Or the non-correspondence betwee both and its apparent German equivalent beide, in sentences like "Meine beide Brüder" which means "My two brothers", and so on. It seems to me that most of this has been known and that quite a number of traditional German grammars of English spent a lot of time on this, on gerund vs. infinitive, and so on. In this case one probably can add an occasional remark which might lead to better presentation of the particular problem. If one knows that there are minimal pair of gerund and infinitive like "Oh, to be able to insult my boss" or "Oh, being able to insult my boss", then one might probably reformulate his description of infinitive and gerund. But I have never seen so far any convincing examples which show clearly that this can be done in elementary teaching of English to German children. I would have to see these examples first before I could adopt any clear point of view. It is very difficult, I think, to contribute to language

teaching at an elementary level from the linguistic point of view. Probably other factors are much more involved.

M. Mikeš: I would like to add to the discussion about what to use at the elementary level and how to start. It depends on the type of languages that are contrasted. If languages such as English and German are contrasted, perhaps there is no need to start from a deep structure, because many things can be solved from the surface structure. If you have to contrast let's say Hungarian and English or Hungarian and Serbo-Croatian, then you must start earlier, with the deep structure. The principle we adopted in our analysis is that we must go deep enough to have a common deep structure, and then say: under such and such conditions, such and such rules are applied for Hungarian and such and such rules for Serbo-Croatian. If you have two languages which are not so very far apart like English and German, you do not have to go so deep.

E. König: Such questions as the one you raised cannot be seriously discussed unless you look at specific examples. And I am not so sure about how to operate with terms like deep structure in teaching.

M. Mikeš: Not in teaching but in your investigation; but in teaching, only the results of your investigation.

B. Paetz: What is the task, must the rules be learned by heart or what?

M. Mikeš: Well, for instance we say that in such and such a case you have to use in Serbo-Croatian this and this. And it is desirable to learn rules by heart, of course.

A. de Vincenz: I do not understand why he thinks that linguistics is of no use in teaching foreign languages at an elementary level and for teaching children foreign languages. Of course, if you put children of seven in an

environment, they would learn a foreign language in six months. The problem i that you do not have such an environment in Romania or Yugoslavia; in West Germany we started having classes with American and German children, where German children can start speaking English in six months. But I am not sure that everybody in all countries starts teaching foreign languages at seven, they can start at fourteen and then you have to apply another approach. On the other hand some countries are teaching modern mathematics to children of six. You could as well give children of fourteen notions of deep structure, and it certainly would not be more difficult than the grammar that is being taught in French primary schools, a grammar that has nothing to do with transformationalism.

E. König: If it is so, I would be all the more glad because I am mainly interested in linguistics, but I should have said that I know very little, or next to nothing, about this problem. I do not know how much linguistics comes into language teaching at this stage, I only know that there are many voices that say "Keep linguistics out as far as possible".

L. Dezső: You gave us the syntactic framework of possible semantic rules, but you did not give the rule itself. All we have is a few examples. Of course, it is rather difficult to give such rules in the current theory of generati grammar, I am more pessimistic about it than you are. I have a literary proble so to say. Transformationalists usually read the trees and the examples and so did I, and I have found that in your trees you do not make any difference between the semantic elements and the lexical elements. Look at your example on page 6, you have RIVER in capital letters. You have it in your text, that's true, but it is misleading. The second question is, why do you use VP instead of P? VP stands for proposition, doesn't it?

E. König: No, it stands for verb phrase.

L. Dezsö: Here S dominates VP and not P. Is there anything behind this or not?

E. König: This is a question about certain linguistic assumptions. First of all, this framework is called generative semantics; you can have transformation applying on lexical material before you enter lexical items. If you have a sentence like "John moved the stone" and you assume a semantic structure - very simplified - "John caused that the stone moved", then you have a transformation called predicate raising. And this is the transformation I was talking about here. For this particular structure it can be formulated very simply. If you have a causative predicate you can sister-adjoin the lower predicate to it. The lower S-node is now pruned since it does not branch, and so is one of the two NP-nodes, one above the other. The NP now becomes the direct object. And then you can replace this semantic material (CAUSE + MOVE) by the transitive verb move from your lexicon. And the other examples are just the same.

The Chairman closed the discussion.

Vladimir Ivir (Zagreb, Yugoslavia)

GENERATIVE AND TAXONOMIC PROCEDURES IN CONTRASTIVE ANALYSIS

A whole range of fundamental questions about contrastive analysis can, and should, be raised before one embarks upon a large-scale contrastive project. Among the questions that the person responsible for the design of the project should answer for himself and his research staff are the following: What is the scope of contrastive analysis? What exactly does it mean to contrast two languages, or two linguistic systems? How does one isolate the linguistic systems for contrastive purposes? What is the metatheory that can bring them together most revealingly? Why should one want to "play the contrastive game" in the first place? What is the end product of contrasting supposed to be? What (practical and non-practical) uses is it expected to have?

The answers to these seemingly "ethereal" questions will have very direct repercussions on such mundane matters as decisions on whether to contrast "whole" languages or only those parts in which differences are noted, whether to base one's analysis on a corpus or on native intuitions, whether to use translation in contrastive work, whether to use this or that format of presentation, whether to submit one's conclusions to the test of classroom experience...

Implicit in most of these questions is the problem of choice of the model of description to be used in contrastive analysis. Only two competing models are available to choose from - the taxonomic model and the generative model. (Notice that these are theoretical models and not name-tags for two schools of linguistics, e.g. structuralist and transformational-generative. For the same reason, it is impossible

to postulate the "traditional", e.g. Jespersenian, model. It is true, of course, that certain linguistic schools are identified with, and built upon, certain descriptive models: the traditional school on a rather ad hoc mixture of taxonomic and generative procedures, the structuralist school on rigorous taxonomic formalizations, the transformational-generative school on a slightly less exclusive generative approach.)

Three possibilities are open to the researcher in this situation: he can either adopt the taxonomic model, or the generative model, or a combination of the two. So much has been written in recent years about the inadequacies of taxonomy that no one will seriously contemplate the first solution now; on the other hand, the virtues of the transformational--generative model have been so impressively paraded that the only acceptable excuse for failure to adopt it in contrastive work is a "practical" one, having to do with the model not being fully worked out yet, or at least not to a degree of detail sufficient for meaningful contrasting. The possibility of combining the two approaches has been considered only as a practical expedient, or an unavoidable evil - almost as something to be apologetic about. No attempt has been made to construct a legitimate, formal (as against informal or ad hoc) taxonomic-generative model.

This paper will not attempt to even outline a model of this kind. But it will try to demonstrate that a taxonomic-generative model is possible (that is, that there is no contradiction between the two terms of the compound) and that it is also indispensable for contrastive analysis (perhaps even for any linguistic description as well). That the two terms are not mutually exclusive can be seen from the following definitions which, I believe, are widely accepted by linguists of all persuasions: (1) "taxonomic", in linguistics, refers to the segmentation and classification of linguistic units, establishing their hierarchies, determining their internal structure and external function and class membership; (2) "generative" refers to the explicit way in which the rules of a language

are stated and ordered so that their automatic (i.e., blind) application will generate "all and only" sentences of that language. (The transformational component is a possible but not necessary part of the generative model.) There is nothing in this definition of the generative model that would rule out taxonomic elements. In fact, the rules of the model are necessarily formulated in terms of taxonomic units and their classes.

Let us now, in the light of these definitions, examine the possible contrastive procedures.

One such procedure would consist in taking the system of forms of a given category in one language and contrasting its entire range of meanings with the range of meanings of the system of forms of the corresponding category in the other language. The results of this kind of analysis would be described under such headings as the following: "The nominal group in English and Serbo-Croatian", "Linking verb + complement in English and Serbo-Croatian", "Gender in English and Serbo-Croatian", "Relative pronouns in English and Serbo-Croatian", "Contrastive analysis of the present tense in English and Serbo-Croatian", "English intransitive verbs vs. Serbo-Croatian reflexive verbs", "Noun phrases as subject in English and Serbo-Croatian" (these are all actual titles of papers that have already appeared in the Yugoslav contrastive series). It is not my intention here to go into the merits and demerits of this approach but merely to show that taxonomy is at the root of it: the items to be contrasted are obtained by segmentation and classification. Of course, the analysis itself may have been effected both in taxonomic and generative terms, depending on the nature of the phenomenon discussed.

Another possible contrastive procedure would consist in starting from a given category in one language and moving towards the plurality of forms used to express its meaning in the other language. Characteristic headings under which the analysis can be made will be the following

(taken again from the publications of the Yugoslav project): "Linking be + predicative clause in English and corresponding structures in Serbo-Croatian", "The English demonstratives this, these, that, those and their Serbo-Croatian equivalents", "Predicative patterns for English adjectives and their contrastive correspondents in Serbo-Croatian", "The present perfect tense and its Serbo-Croatian equivalents", "Lexico--grammatical features of must, should and ought to and their equivalents in Serbo-Croatian", "Ten English modals and their equivalents in Serbo--Croatian". I will leave aside the question of what equivalents and correspondents are and how they are established and will only draw attention to the fact that taxonomy again plays a major role in isolating the elements to be contrasted and in the process of contrasting itself.

Yet another approach would be to take different linguistic processes of one language and see how they compare with processes performing the same function in the other language. In this case one would get analyses such as "On inversion in English and Serbo-Croatian", "Composition in Serbo-Croatian and English", or (to invent some possible topics) "Relativization in English and Serbo-Croatian", "Relative clause formation in English and Serbo-Croatian", "Rules of premodification in English and Serbo-Croatian", "Reflexivization in English and Serbo-Croatian", "Nominalization in English and Serbo-Croatian", "Idiom formation in English and Serbo-Croatian". The contrastive statement in this case will best be made in transformational-generative terms, but taxonomy will be an integral part of the generative statement: nouns will be subclassified into abstract and concrete, animate and inanimate, human and non-human, count and non-count; modifiers will be one-word and group, adjectival, participial, nominal and adverbial, color and size, descriptive and limiting, etc. The important thing to note is that classification is necessary, and revealing, even when generative processes are contrasted rather than static structures.

Finally, one more approach to contrastive analysis is possible: it would consist in taking meaning as a starting point and describing the different forms in the two languages in which it can be expressed. Possible headings under which the analysis might be presented would be the following: "Expression of time relationships in English and Serbo--Croatian", "Expression of the actor in English and Serbo-Croatian", "Expression of manner in English and Serbo-Croatian", "Actor-Action relationship in English and Serbo-Croatian", "Definiteness in English and Serbo-Croatian", "Expression of spatial relations in English and Serbo-Croatian". Even though no contrastive project has been organized along these lines because there is as yet no satisfactory taxonomy of meanings, it is easy to see that taxonomic procedures would figure prominently not only on the semantic side but also on the grammatical side of such a project.

My intention in the preceding discussion has been to warn against an off-hand rejection of taxonomic procedures and to suggest that they have a rightful place in a generative framework of contrastive description. The reasons for this - in addition to the basic reason stated above that linguistic description of any kind, generative or not, presupposes a certain amount of taxonomy - are twofold: first, not everything in language is equally amenable to a generative treatment; second, in contrastive analysis it is just as important to explore all the repercussions and ramifications of a given rule as it is to present the rule itself.

These two points deserve a closer look.

There are whole areas of linguistic description in which generative treatment is either cumbersome or unilluminating, and simple classification is both descriptively and contrastively more effective. With respect to the feature of number, for instance, English nouns are classified into those with both singular and plural forms and singular and plural

agreement; those with singular form only and with singular and plural agreement; those with plural form only and with singular and plural agreement; those whose singular form agrees with singular and plural verbs (with an appropriate shift in meaning) and whose plural form agrees with plural verbs. We thus get a very revealing classification which can be usefully contrasted with a classification of Serbo-Croatian nouns with respect to the same feature; thus:

	sg. &pl. agreement	pl. agreement	sg. agreement
sg. &pl. form	house, mouth, newspaper, family[1], number[1], beer[2]		
pl. form	means, statistics	trousers, pyjamas	United States, physics
sg. form	sheep, police	cattle, family[2], number[2]	advice, beer[1]

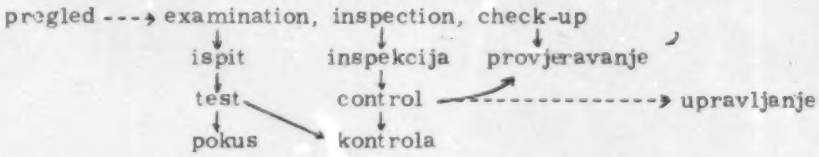
It is noteworthy that although the relation between form and agreement are by no means rigid in English, no nouns are found which would have both singular and plural forms but only singular or only plural agreement. Note also that some nouns belong to two classes (e.g., family, number), or alternatively appear as two lexical entries.

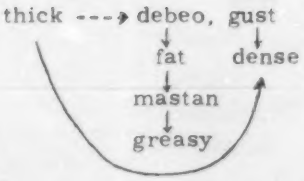
	sg. &pl. agreement	pl. agreement	sg. agreement
sg. &pl. form	kuća, obitelj[1,2], broj[1], pivo[2], sredstvo, pidžama, ovca, policija savjet		
pl. form.		usta, novine, hlače, Sjedinjene Države	
sg. form	broj[2]		statistika, fizika, pivo[1], stoka

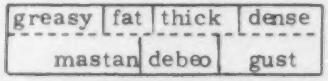
Apart from the obvious contrastive statement to the effect that in Serbo-Croatian form determines agreement automatically and that almost no mismatching is tolerated (except for the marginal possibility involving a few nouns of the broj[2] sub-class: Velik broj ljudi ostao je/ostali su bez krova nad glavom), a detailed comparison of the two tables shows different categorization of individual nouns and points to numerous sources of interference.

My second example of the usefulness of segmentation and classification techniques in contrastive work is taken from the analysis of lexis. It is a well-known fact that the semantic fields of "equivalent" lexical items in any two languages are rarely the same: much more frequently the semantic field of, say, an English item is wider or narrower than the semantic field of its Serbo-Croatian equivalent. It is thus possible to group English words into those whose meaning is narrower than that of any of their Serbo-Croatian correspondents, those whose meaning is broader than that of their Serbo-Croatian correspondents, and those whose meaning is identical to that of their Serbo-Croatian correspondents. The first group would include sets like arm, hand - ruka; market, square - trg; paint, dye, color - obojiti; skin, hide, leather - koža; stove, furnace, kiln - peć; stranger, foreigner, alien - stranac; cashier, treasurer, teller - blagajnik; lucky, happy - sretan; shade, shadow - sjena; learn, study, teach - učiti, etc. The second group would include examples like the following: strina, teta, ujna - aunt; stric, tetak, ujak - uncle; odgoj, obrazovanje - education; katolički, širokogrudan, širok - catholic; kemičar, ljekarnik - chemist; ministar, svećenik - minister, model, maneken - model; obući, obuti - put on; svući, izuti - take off, etc. If words of identical meaning can be said to exist at all, the third group is contrastively uninteresting. But two interesting complications are revealed by a closer analysis of the first two groups: first, some English words are both broader and narrower

than their Serbo-Croatian equivalents (e.g., party - partija, ekipa, domjenak, stranka; but partija itself has meanings lacking in party: batch, consignment, lot and game, match); second, complex relationships hold between words in the same semantic field and between different semantic fields; e.g.,







Finally, as examples of taxonomic syntax we can quote various surface realizations of generative transformational processes. The business of contrastive analysis is the contrasting of both generative processes and surface structures - not just one, and not just the other. The contrasts that the learner can profit from lie pretty close to the surface. On the other hand, he can also profit from an (albeit not fully conscious) awareness of the processes followed by the two languages in reaching their respective surface structures. To put it more bluntly: there is no point in contrasting deep structures because they are presumably identical in all languages; what we can contrast are the processes that work on such deep structures and the products of such processes. It should be stressed that both the processes and the products deserve our equal attention.

Let me illustrate. If we are contrasting English and Serbo-Croatian predicative adjectives, we can note that their uses are matched in the

pair of sentences:

These shoes are comfortable.
Ove cipele su udobne.

However, the following pair is different:

I'm comfortable.
Meni je udobno.

The generative statement of the difference will be made in terms of the Instrument or the Experiencer serving as the deep structure representation of the surface subject and in terms of the transformations designed to generate these particular surface realizations. Taxonomically, we will say that the surface structures are NP + BE + ADJ in both cases in English, and that this is the structure that the learner will be aiming for. His mother tongue will present no obstacle in the first case, since the Serbo-Croatian surface structure corresponds to English (NP + BITI + ADJ) and has been produced by the same generative processes. In the second case, the Serbo-Croatian surface structure is not only different (NP_{Dat} + BITI + ADV) but is also related to a different deep structure and different generative processes. Since this surface structure is the basis from which the learner starts, we can predict interference and the (actually recorded) error of the kind *To me is comfortably. On a slightly more sophisticated level we find errors like the following: *To me (it) is comfortable. *It is comfortable to me. In this case the learner feels that I is not the true subject and introduces the dummy it, equating another surface form of the same Serbo-Croatian sentence with the surface form of a completely different sentence:

Jasno mi je (da) ... -- It is clear to me (that)...
-- To me it is clear (that)...
Udobno mi je. -- *It is comfortable to me.
-- *To me it is comfortable.

There is one further aspect which is important for linguistic

analysis in general, but which has a special importance in contrastive analysis: this is the study of usage, of actual performance, as against the account of competence obtained through an investigation of the two systems. The study of usage is needed for two reasons: first, it serves as a check on our descriptive statements and ultimately on the choice of what we are going to teach (it thus has a very definite theoretical and practical significance); second, it is a subject of contrastive study in its own right (it is necessary to contrast patterns of usage just as much as it is necessary to contrast patterns of structure). Theoretically speaking, the study of usage will tell us whether our rules cover everything that actually occurs in the language, whether the two languages produce something not provided for in the rules (in which case the rules will have to be extended), or whether they fail to produce everything that the rules say they should produce (in which case the rules will have to be refined). It is also possible that certain patterns of usage are idiosyncratic, not easily generated by any rules, and only capable of taxonomic presentation. From the practical point of view, we will want to base our teaching on what actually happens in the language, not on the potential products of our rules regardless of whether these possibilities are exploited by native speakers or not. Thus, for instance, it would be difficult to formulate a rule which would generate the first sentence and not the second:

> He is impossible to live with. (cf. also: He is an impossible man to live with. It is impossible to live with him. To live with him is impossible. The impossibility of living with him...)
>
> *He is possible to live with. (cf. *He is a possible man to live with. It is possible to live with him. To live with him is possible. The possibility of living with him...)

Certain collocational restrictions, too, can perhaps only be listed rather than generated by explicit rules:

> He took it with his <u>bare hands</u>. -- Primio je to <u>golim rukama</u>.
>
> He could see it with the <u>naked (*bare) eye</u>. -- Vidio je to <u>golim okom</u>.

Not only does usage vary among different groups of speakers and in different situations within one language (e.g., British and American, Croatian and Serbian, urban and rural, poetic and non-poetic, technical and non-technical, formal and colloquial, etc.) but attitudes to usage vary between languages, and these should be contrasted as everything else is contrasted. A contrastive analysis of the passive voice in English and Serbo-Croatian, for instance, would remain very incomplete without a statement of usage, that is, of the appropriateness of the passive in different "styles" in the two languages. While the first pair of sentences are straightforward correspondents, the second pair are not because the Serbo-Croatian passive is here only possible but not very probable (the natural correspondent is the sentence in brackets):

The house was bought with borrowed money. -- Kuća je kupljena s posudjenim novcem.

The house was bought by his sons. -- Kuća je kupljena od strane njegovih sinova. (Kuću su kupili njegovi sinovi.)

The fact that American English usage allows both the preterit and the present perfect (and perhaps prefers the former), while British English accepts only the latter in the following sentence is significant for the description of English and for the contrastive statement concerning English and Serbo-Croatian tenses:

Am.E. I never visited Venice (so far, in my life).

I've never visited Venice.

Brit.E. I've never visited Venice.

*I never visited Venice.

The Serbo-Croatian word angina has the English correspondent angina, but while the Serbo-Croatian term is both technical (medical) and non-technical, the English term is only technical and is replaced in non-technical use by tonsillitis, quinsy, sore throat. Similarly, katastrofa has catastrophe as its English equivalent, but in ordinary

usage its normal equivalent is disaster; Serbo-Croatian funkcionar has certain connotations (and uses) that English functionary does not have and these are normally covered by official.

* * * *

In this paper I have claimed that while the (transformational) generative model is very powerful it is nevertheless inadequate for contrastive analysis. My proposal for a "contrastive mix" therefore includes three equally important and most closely related procedural components: generative (specifically, transformational-generative), taxonomic, and usage. None of them can be regarded as being more important than any other and no contrastive analysis can be regarded as complete before all three of them have been applied to the full.

DISCUSSION was opened by the Chairman, Dr. Ranko Bugarski (Beograd)

J. Fisiak is against equating "taxonomic" and "surface", since TG takes surface phenomena into account. Nor does it exclude the lexicon. Your statement that trasformational-generative grammar is not valid for contrastive studies to me is a damaging proof that transformational-generative studies have no use in linguistics at all.

You suggest practical procedures for handling two languages, which I do not blame. But if contrastive studies are a part of linguistics, we should say more about their relation to general theory and other branches of linguistics. It is not true that studying corresponding processes in languages requires a transformational approach; cf. the "item-and-process" model of Pike and others in the fifties in America.

V. Ivir: First of all to the relation between "taxonomic" and "surface". Let me read my definition of "taxonomic". Taxonomic refers to segmentation and classification of linguistic units, establishing their hierarchies, determining their internal structural and external functions and class membership. Now, seen in this way I think taxonomy would cover more than just surface structure and I agree that the whole intonation of this paper was towards surface structures, I accept that. But also do not forget that I am deliberately overstating something, saying something I do not believe myself in order to make a case for something which has been neglected. This paper speaks about the virtues of taxonomy. I would be the first one to admit that there are certainly I don't know how many vices for each virtue; but I would simply say that these are virtues we cannot do without. Also what would be the use of my listing the advantages of transformatio

grammar, when the paper by Mr. König gave us everything that we need there? I just want to give a sort of counterbalance.

This question of lexicon being both taxonomic and generative. Again I would fully agree that this is true. For contrastive purposes, at least at this moment, I cannot see that generative-semantic procedures are useful. I did not mean that TG is not valid for contrastive analysis and consequently not for linguistic description at all. On the contrary, it is very valuable for contrastive analysis, but it is not valid that we can forget about everything else. As for the four approaches to contrastive analysis, of course they are purely practical procedures and I list them only to examine in their light the applicability of either generative or taxonomic procedures: otherwise they have no place in this paper at all.

J. Fisiak: May I ask another question in connection with this? Presenting these four approaches, did you always have in mind a unidirectional type of contrastive studies or bidirectional?

V. Ivir: A unidirectional model only to the extent that the Serbo-Croatian project is unidirectional, otherwise I would leave these things open.

Ljiljana Mihailović: About this term "taxonomic", it has got a sort of derogatory meaning nowadays. But I think that generative grammar is really much more taxonomic than taxonomic grammar as we think of it, because the classifications are much more exhaustive than in structural grammar. If you take the features in lexis I think that no serious work nowadays can be done on grammar without taking them into account. And that is taxonomy. And if you take all the possible, let's say verbs, all the features that you have to have in order to be able to form a grammatical sentence, there is much more taxonomy in

that than in what we used to have. I think that the main distinction is whether the grammar is purely descriptive or rule-oriented, whether you are just describing a chunk of corpus as something given or you are doing the analysis in such a way that you can generate other sentences on the basis of the rules. I think that none of us can nowadays do any serious analysis without adopting the view that the rules should be given. And there is another thing that I think should be distinguished. What we are doing for the preparation of the material is one thing another thing is what we are giving the students. We can have a serious analysis a rule-based analysis, in our material, but presentation to the students is quite a different thing.

There is a third thing that has not been mentioned: cultural patterns. It has not occurred to anybody what an important thing it is to do a bit of contrastive analysis on the differences in culture, I mean culture as considered by anthropologists.

R. Filipović: That was mentioned as one of our possible studies. As we had to shorten the program for our project we left it out.

R. Bugarski: Also there is at least one paper on this, published in fact before the project started by Dr. Ridjanović.

A. de Vincenz: The lecture was a systematic presentation of a proposal for an unsystematic procedure. I do not think you can combine two theories and a third thing which is not a theory. I think it would be better to have one unifying theory from somewhere or other. I suppose you understand taxonomics as structuralism. I personally feel that there is a better version of taxonomics one which could be adapted to the framework of generative grammar, especially the lexical problems. If you want to teach your students English phonology,

then I suppose the only way is to present them with the complete phonological system of Serbo-Croatian and the complete phonological system of English showing where the differences are. It is not so easy for the lexicon, but there are some microstructures in the lexicon and there are some attempts to describe them. I am thinking of Prof. Coseriu. Of course, within the European linguistic union it is very easy to translate the names of the days of the week from English into Serbo-Croatian; in a week which had ten days it would be slightly more difficult. But that would be our problem. You would have to compare microstructures between Serbo-Croatian and English. And finally, I was slightly shocked when you said that Serbo-Croatian angina and English angina are the same word, but I suppose you are right. My afterthought is, when you say that it is natural to translate angina with angina, or katastrofa with catastrophe, it is something that the native speakers have been doing for ages, so there must be something to it. We should analyze this thing and find reasons for it. These are points of contact between the phonological component and the lexical component.

V. Ivir: When you speak about taking two theories instead of one which is coherent, I would agree of course. What I wanted to present here was a plea to work out, if possible, one theory that would have the advantages of both of these two. I do not claim that I have even tried to make one theory, but it will be necessary as far as I can see. I still do not understand how we can contrast our languages fully with one theory, no matter how clear it is, of those that are available now. As for the phonological contrasting - of course you will contrast two phonological systems, but speaking from experience, there are

certain quite numerous points of interference at the level of phonetics. If phonology is contrasted at an abstract level, it is equally important to come down to the actual language material and contrast the phonetic stuff as well. And that happened with my grammatical studies: taking the abstract systems, i.e. contrasting these, and also contrasting the actual linguistic material.

R. Filipović: What Dr. Ivir has just said is not only his own idea but the result of our work. An analyzer in doing a contrastive analysis of two languages has to apply several approaches; it is not that he does not want to use one, but he is forced to use several approaches as a result of the nature of contrastive analysis.

J. Fisiak: It is clear to general linguists and all of us here that no linguistic theory so far presented is adequate. The problem is that at the moment we have to adopt the most adequate model and try to work and develop a theory.

L. Dezső: The term "taxonomic" was taken from the methodology of science and used by the generative grammarians in order to label all the non-generative theories as taxonomic. Now you have taken this distinction between linguistic theories but at the same time you have turned this label against generative grammarians, saying that you are for a theory which accounts for the facts, you explained "taxonomic" thus. Those were, I suppose, the reasons for your comments. I think there is no necessity to say something more about it; we are for peaceful coexistence. We must be, because generative grammar does not account for many problems and we have to solve these problems in one way or another.

The Chairman closed the discussion.

Dumitru Chitoran (Bucharest, Romania)

A MODEL FOR SECOND LANGUAGE ACQUISITION

1.0.0. It has been mentioned (Nickel and Wagner, 1968) that the process of language acquisition can be regarded as an act of communication, of transmission of information. The specificity of this act of communication lies in the fact that it is not performed on the basis of a previously acquired code. In acquiring language, the speaker does not use a code; the uncoding of the messages he receives represents at the same time the key to the respective code. On the basis of the language facts he is exposed to, the speaker internalizes the linguistic code (i.e. the linguistic system of his mother tongue). To use the terms of generative-transformational linguistics, on the basis of data pertaining to linguistic performance, he acquires the linguistic competence of his mother tongue.

1.0.1. The linguistic competence of the ordinary speaker, i.e. his capacity to use language correctly and creatively by recourse to linguistic operations such as: the construction and/or the semantic interpretation of an infinite number of grammatically correct sentences, including sentences which are totally new to him, the interpretation of sentences which are semantically ambiguous, the postulation of certain relations among sentences (paraphrase, transformations, etc.), does not represent conscious, explicit knowledge of how the language operates; it is the result of a process through which the speaker constructs the grammar during childhood by the internalization of rules abstracted from data of linguistic performance.

1.0.2. On the observation of linguistic performance data it is, however,

possible to contrast an explicit theory of linguistic competence, i.e. a theory which represents the scientific model of linguistic competence. The theory renders explicit the processes implied in the functioning of language. This is what linguists and grammarians do when they write grammars for natural languages.

1.1.0. There are therefore two meanings of the term grammar in modern linguistics: grammar$_1$ (G_1) which represents the internalized linguistic competence of the ordinary speaker, of which he is not consciously aware, and grammar$_2$ (G_2) representing the explicit scientific model of this competence as formulated by the linguist.

1.1.1. It has been suggested that the acquisition of linguistic competence, the construction of a given grammar, although an extremely complex task, is achieved so successfully and so uniformly by the human species that the only explanation that can be given is that there exists an innate propensity for language acquisition, an inborn capacity of humans to acquire language.

The thesis of apriorism in linguistics, which sometimes is carried to an extreme position (it is not only the capacity for language acquisition that is transmitted genetically but to a great extent the linguistic structure itself: the task of the child is to proceed, through elimination, to the choice of those elements of structure which fit the linguistic environment into which he is integrated) is highly arguable and far from having been fully validated. It has been mentioned in the present paper simply because it opens up new interesting perspectives and a new angle of approach to the general problem of language and language acquisition.

1.1.2. Despite the great diversity characterizing natural languages, they all share common essential traits to such an extent that one could rightly say that "all languages are tailored to the same cut".

These elements of linguistic form and substance which are shared by all languages have been called absolute linguistic universals. Other elements which are common to number of languages but not to all languages, so that their existence is not intrinsic to natural languages, have been called non-universal common features. In addition each language exhibits specific elements differentiating it from all others.

It follows from the above that the acquisition of linguistic competence, the construction of grammar$_1$ during the period of language acquisition represents the sum-total of these three elements: universals, non-universal common features and elements specific to a given language.

2.0.0. All these facts have been mentioned in order to examine a problem which presents great interest for foreign language learning. It would be interesting to analyse systematically what the similarities and the differences are between first language acquisition and second language acquisition.

2.0.1. Since in both instances we are dealing with the acquisition of a given linguistic competence, the acquisition of a mechanism of constructing and interpreting sentences, there is a basic analogy between the two processes.

2.0.2. The analogy does not, however, imply absolute identity because there are essential qualitative differences between the two processes.

In the first place, while the task of the child who acquires his mother tongue is also to acquire the ability to speak as a general human trait, the foreign language learner builds on an already existing linguistic competence, namely on that of his mother tongue. It is, in fact, from this basic difference that the idea of contrastive analysis, in its original form, sprung.

In the second place, if we disregard the few instances when a foreign language is acquired almost simultaneously with the native

language, or in permanent contact with the respective linguistic environment, a second language is usually taught and learned under totally different conditions, namely within the framework of an organized teaching process implying an adequate didactic and methodological programming.

The grammar of the foreign language (GFL_1) as it is 'constructed' by the learner will consequently have a different character. Since, to a great extent, it is built on the grammar of the native language (GNL_1) it preserves the absolute and accidental universals shared by the languages in question, to which are added the specific elements of the language to be learned.

The hypothesis that we put forward is that during the process of foreign language learning the learner becomes increasingly aware of linguistic universals whose recognition becomes his conscious task and which are constantly signalled to him by the factors intervening in the teaching process.

Accordingly, linguistic competence in a foreign language has a more conscious character than that of the native language, it implies mixed elements of both $grammar_1$ and $grammar_2$. Moreover, the learning of a foreign language in the above mentioned conditions, leads to a general awareness of linguistic universals revealed by contrasting the respective linguistic systems.

What results is aptly put in the following quotation: "Grammar (of the foreign language) is a diffuse ensemble of

$grammar_1$ +

$grammar_2$ of the native language +

$grammar_2$ of the foreign language, causing by ricochet a conversion of the grammar of the same individual into a diffuse ensemble of $grammar_1$ + $grammar_2$ of the native language". (S. Golopentia-Eretescu, 1969).

Two important conclusions can therefore be drawn for our specific purposes:

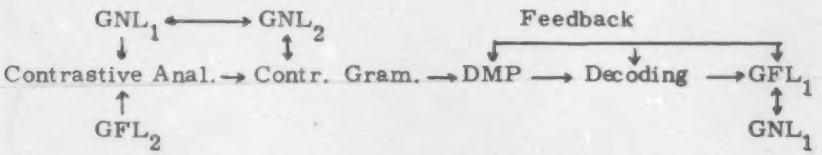
a) The grammar of a foreign language as constructed by the learner (GFL_1) is basically a contrastive grammar, or a "contact" grammar as it has been suggested more recently (W. Nemser and T. Slama-Cazacu, 1970).

b) This grammar is of a mixed type, since it includes elements of both $grammar_1$ and $grammar_2$. The conscious character of foreign language grammar is acquired both internally by awareness of universal elements and externally through the intervention of the teaching factors (teachers and teaching materials).

2.1.0. It has also been pointed out that a comparison of native and foreign language learning is significant in the light of the distinction between deep structure and surface structure (McNeill 1968). While the child proceeds from deep structure (i.e. the type of syntax which is most intimately linked to meaning) to discover how it is related to sufrace structure by means of transformations, the task of the adult is a more formidable one. Since it is assumed that his inborn ability to perceive linguistic universals has been lost, he proceeds from surface structure (the well formed sentences in the foreign language which are presented to him) matches them to the surface structure of his native language which is in turn related to the deep structure. By contrast, the learner becomes aware (finds out or is shown) the new types of transformations that relate the surface structure of the foreign language to its deep structure. It follows therefore that in contradiction to the child, the adult foreign language learner starts from syntax which is maximally remote from meaning. Since there is common agreement in characterizing the ultimate stage of foreign language acquisition as the ability to "think" in the new language there is every reason to

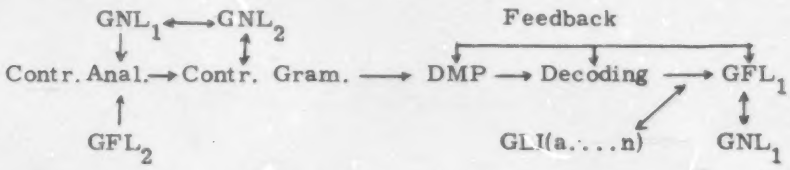
believe that the above hypothesis is correct. We do not share the practical conclusion drawn by McNeill, namely that foreign language learners should be exposed to "child-like" sentences which are supposed to reflect language-universals, but we believe that his hypothesis is highly relevant for an optimum planning of the teaching process.

3.0.0. By taking into account some of the most important factors and processes intervening in foreign language acquisition as achieved under the conditions of organized and didactically and methodologically planned teaching, we could postulate the following tentative model of foreign language learning (modified after Nickel, 1968).



The model specifies the following aspects intervening in the process of internalizing the foreign language: a contrastive grammar resulting from the contact between the two linguistic systems, built both by the learner but more explicitly so by the linguist and language teacher whose task is to signal contrasting language facts; an activization of linguistic introspection which leads to awareness of linguistic universals and the mixed character of $grammar_1$ (which includes also elements of $grammar_2$), the didactic and methodological programming (DMP) implied in the process, the phenomenon of feedback as well as the phenomena of interference which remain present throughout the process of foreign language learning. The phenomenon of feedback which is also present in the process of native language acquisition, has a different character, since, in addition to internal feedback, it is permanently supplied by the language teacher.

3.1.0. In relation to the phenomenon of interference, it has been rightly pointed out (W Nemser and T. Slama-Cazacu, 1970) that given the sequential and individual nature of foreign language acquisition, the contrastive analysis should take into account not only the interference between the two linguistic systems but also between the successive stages which the learner covers. This point of view, which had been earlier mentioned also in the case of native language acquisition, throws new light on the process of foreign language acquisition. It no longer appears as a grafting of a new linguistic system on an already existing one but rather as a more complex activity of elaborating intermediate linguistic systems (GIL - a ....n), each having an increasing degree of approximation to the grammar of the foreign language. It will accordingly be necessary to modify the model of foreign language acquisition to account for such phenomena:



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DISCUSSION was opened by the Chairman, Dr. Damir Kalogjera (Zagreb)

A. de Vincenz: I already wanted to propose yesterday that you should try to retranslate your Serbo-Croatian translation back into English to see what happens with your English influenced by Serbo-Croatian, because your problem is of course English influenced by Serbo-Croatian and not Serbo-Croatian influenced by English. And now what you need would be a third corpus, incorrect English sentences produced by Serbo-Croatian learners, and this corpus would probably be decisive for your analysis.

R. Filipović: We have it in those three M.A. theses which were mentioned yesterday.

A. de Vincenz: As a matter of fact Mr. Ivir said something very important, that the learner is not only being influenced by his own language, by structures of his own language, but also that he generalizes some structures of English and produces incorrect English sentences.

R. Filipović: What you have said is true, Prof. de Vincenz. Some time ago I read a thesis in which a man examined Shakespeare translations into Serbo-Croatian. He had to back-translate the Serbo-Croatian translation of Shakespeare to show the English-speaking public what the translation was like. And in that book you can find exactly what you said. That's your first point. And the second point which you mentioned is absolutely evident. The authors of the M.A. theses found quite a big group of errors that are based on exactly what Dr. Ivir said. There is no interference from the target language within the same structure, I mentioned in my paper, in the chapter on error analysis. And when you get our publication Pedagogical Materials, with long summaries of the theses, you will have examples quoted which I could not quote in this

rather limited report. But going back to Dr. Chiţoran's paper. Did you say that McNeill's paper suggests that we should start the foreign language with the simplest possible sentences used by children? What would that mean?

D. Chiţoran: His specific words actually are "child-like sentences, even distorted sentences". From that point of view I said that I would not go that far.

R. Filipović: I suppose that Prof. Slama-Cazacu could help us. Some time ago I read in a paper by a psychologist that the direct method was wrong in essence because it tried to apply the process of learning the mother tongue to the foreign language, which is wrong from a psychological point of view.

T. Slama-Cazacu: It is a very complex problem. First of all it depends on what we understand to be the process of first-language acquisition. If it is understood on the basis of the behavioristic model of learning theory which is a mechanistic model, it is one thing. However, if one understands it, as I do understand it, as a process of development of the child's awareness of his own language, then the child does not acquire his mother tongue in a mechanical way. He thinks about it, he extracts rules, and that's where he begins to regularize language and he forms such creations as you have also in the grown-up learning a foreign language. "Goed" for instance, is an example given by Roger Brown found in children, and it is an example I found in the error analysis performed by Dušková in Czechoslovakia on grown-up people learning English, for this is a process in which thinking is involved. So if we try to make an analogy between foreign-language acquisition in the grown-up and first-language acquisition in the child, this transfer is not possible if we understand the process in the child as a mechanical one. If we understand it

as a process in which thinking, consciousness is involved, I think that many analogies are possible. I speak about analogy purposely because, of course, it is not identity, and it is also dangerous sometimes, as any analogy is dangerous, to make this transposition. But certain universals of learning might be found in child language acquisition as well as in grown-up foreign language acquisition. Tomorrow I may extend this point a bit; it is a part of my ciriticism against contrastive studies performed in the traditional way. They are not able to discover such errors and such processes as involve either the influence of the former system, approximative system, in the foreign language, or the regularization of the language as a universal of learning that is not due to the immediate encountering of the two systems.

R. Filipović: This system exists in native language acquisition too, doesn't it? When a child learns his own mother tongue he has got exactly the same transition system.

T. Slama-Cazacu: This is only a part of a system of thinking David McNeill has. It is a nativistic theory and this idea which was discussed is only a part of this nativistic theory. He thinks, as many generativists do, be they psycholinguists or linguists, that language is inborn, and he even formulates this in the formula that a child has an inborn concept of sentences. It looks very strange to force grown-up people learning a foreign language to learn childish sentences and even distortions of the language. But he believes that this is inborn and that it is natural that one also begins with such sentences with the grown-up people.

M. Mikeš: I would also add something to this parallelism between acquisition of the first language and the second language. In my vision the

parallelism is roughly the following: the child generates its sentence, but as it has an innate capacity of abstracting, the generating is done under the influence of the environment language, of the mother tongue. So in the process of acquiring the first, mother tongue the child goes through a series of approximative systems which at the beginning are very far from the grown-up system, because the child's surface structure is roughly the same as the deep structure. As the child develops, grows, these approximative systems begin to lose their approximative character and fall together with the adult speech. Now, when we learn a second language we also start from a system, not from the innate system but from the systems that are our mother tongue. As we learn the second language we also form so-called approximative systems; I agree with the theory of Dr. Nemser and Prof. Slama-Cazacu. But there is a great difference between the aproximati systems in child language and in the acquisition of the second language, because now there is the mother tongue which helps and interferes at the same time in forming the approximative systems. And therefore I say that McNeill's suggestion is quite wrong, because the person who starts to learn a second language has developed systems in his mother tongue, so he cannot go back to the beginning.

A. de Vincenz: I think it is a very important observation of Mrs. Slama-Cazacu about the child's developing the perfection of his own language. I have personally observed that you cannot give linguistic instructions to children of three or four. You cannot even tell them "Don't speak like this", you can only tell them "Speak like this" and then they will imitate. Afterwards they start reflecting on the language and then you can tell them "You shouldn't speak like this" or "You shouldn't speak like this because..." I think analogies are

dangerous. Every adult will say "I bringed" and I suppose most English children say "I bringed" instead of "I brought". But there are other sentences. For instance, I suppose English children say "Me like you" or "He like me". I do not see the utility of teaching such sentences to Serbo-Croatian speakers when you can give them instructions about using person forms correctly. I would not like to repeat what Mrs. Mikeš said, but I would like to remind you of the time factor. The child has three or four years, twelve or fourteen hours a day, for learning his language with the instructor; his mother is always there. We do not have so much time, so I think we should take the mother tongue as a shortcut.

T. Slama-Cazacu: There is an idea about giving a grown-up distorted sentences as examples of wrong sentences. In psychology this is well known to be wrong. For instance, in a poster showing the danger of electrical shock, if you show the danger in negative form, it will be still more dangerous than showing a person the danger in words or in positive form. Because it is the negative form that influences him more and forces a strong image. And there are many studies in work psychology that show exactly the wrong effect of such posters.

J. Fisiak: I am slightly worried about so-called accidental universals, because what we include is both certain features which result from the fact that various languages are genetically related, and certain features which may appear in various languages far away. These two (I am just thinking aloud - I have not tested this) may have different statuses in foreign-language acquisition.

D. Chiţoran: As to this theory I can only follow the "official line" in saying that the accidental universals are those which are not intrinsic to the nature of language. They just happen to be shared in common but there may be languages, there are languages, which haven't got them. As to whether this will indeed imply a difference as to what I call the awareness of linguistic universals I do not know. It is very difficult to identify linguistic universals as such, but theoretically and hypothetically there should be a difference between absolute universals and accidental as reflected in language acquisition.

J. Fisiak: I agree with this, I only meant that within the group of accidental universals you have two types: one which results from genetic relationship between languages, for instance English and Polish will have certain features which will be genetic, which will be traced back historically. Whereas Polish and Hungarian, for instance, won't have these features because they cannot be traced genetically to a source. But they may share some accidental features which other languages do not.

L. Dezső: What is the reason for labeling them as universals?

R. Filipović: I think the term is very unhappy. These things exist, but Dr. Chiţoran could probably give them different names, because if they are accidental they are not universal. But they do exist as a category.

D. Chiţoran: As a category of shared elements.

J. Fisiak: Of certain languages.

R. Filipović: That's why it's not universal in the meaning of the word universal that we use in linguistics nowadays.

D. Chiţoran: Referring to McNeill's suggestion I would only like to say that we have a proverb in Romania which says "When I am not about you can

even beat me", so in defence of his theories, since he is not around here, I would not so strongly attack him tonight.

The Chairman closed the discussion.

Tatiana Slama-Cazacu (Bucharest, Romania)

PSYCHOLINGUISTICS AND CONTRASTIVE STUDIES

1. This paper is not intended as a survey of the present-day psycholinguistic research. As a matter of fact, there have been very few attempts at theoretical psycholinguistic discussion in reference to contrastive analysis (CsA), and even the direct practical applications of psycholinguistics to language learning and teaching have been rather rare and confined to limited topics or to the validation of particular teaching procedures (see for instance 11; 12), etc.; moreover, these studies usually also fail to clearly dellmit the very concept of psycholinguistics.

Therefore, I am going to refer to a personal psycholinguistic conception (such as emerges from my papers and books, especially the volume "Introduction to Psycholinguistics" - 15; 17; 18). This attempt at discussing the theoretical basis and the methodology of contrastive linguistics (CsL) from a psycholinguistic point of view was the aim of an article written jointly with W. Nemser (9; see also 7 p. 4; 8 p. 18) and underlying the present communication.

Such as it has been practiced, for so many years, CsL has not achieved the results and above all the valid predictions that were expected from an applied field, once launched into costly research activity. Therefore many Jeremiads are to be heard about it, even claims of its death.

What I am going to say here concerning CsL may sound like a perfidious sketch revealing a somewhat Trojan horse intrusion into

this field. If, however, Troy disappeared after a tremendous fire, my conviction is that the contrastive approach should not only survive after having passed through fire, but will even reappear in a young and more robust form, remoulded and repolished by the purifying fires.

2. I mention here only as a starting point the fact that CsL, in its present form, has as its objective explanation and prediction in reference to foreign-language acquisition, by means of establishing similarities and differences between the language which has to be learned (the target language, T) and the language or languages previously known (the base language, B). It is asserted that, where the structures of two base and target languages coincide, learning will be facilitated, and where the languages differ, learning will be inhibited or distortions will appear (with regard to such effects, CsL uses the psychological concepts or transfer-interference).

2.1. CsL and its procedure, CsA, besides a series of important principles, whose application proves useful in the practice of foreign--language teaching, also contain fundamental faults, arising from non--adherence to certain stated principles, from contradictions, or from being based on a model which is too abstract and over-simplified in some of its aspects, when confronted with the practical reality to which it is to be applied.

2.2. I am going to sum up very briefly some of the critical principles formulated on the basis of the examination of this conception. I) Starting as an "applied field", CsL loses almost completely contact with reality - be it practical reality (the classroom) or merely that of communication proper. Although contrastive studies intend to predict and explain the learner's behaviour, the methodology itself ignored this behaviour: deductive principles precede the exploring of reality, that is, what is going on in the learner; procedures are, as a matter

of fact, based on the abstract concept of language (L), research being performed in vacuo. Consequently, the critical points of the contact between languages B and T, the topics under study, etc., are subjectively (hence arbitrarily) chosen, a function of the personal hypothesis of the linguist, of his interest in a certain topic or in a certain general linguistic theory, etc. II) In describing and explaining, CsL offers complete freedom - just because it does not indicate anything in this regard, and because it does not include any precise model of language of its own, or a method of data processing - to resort to different, even opposed linguistic theories proper (transformational and taxonomic as well). These theories - subjectively chosen and in fact often yielding different predictions - offer an unsatisfactory image of incongruency between the various research-projects in this field or even of a lack of unity (a "Persian carpet" appearance) within the same project. III) Very often, predictions proved to be wrong, invalidated in the teaching process. IV) The nonstructural principle, of a linear comparison - at the same level -, and fragmentarily - at different levels - leads to ignoring or omitting important systemic influences of the B language. V) Comparison is usually oriented towards language T in the sense that only coincident structures in both systems are kept in view, starting from T. VI) Learning is approached in fact statically, as an instantaneous exposure to the whole T system from the very beginning, and as an instantaneous imprinting, the role of storage from a prior stage being ignored. VII) A critical point, of which I have become aware more recently, following the publication of the above-mentioned article, is also the following: CsA performed in abstracto leads to ignoring errors others than those brought about by the structural peculiarities of the two systems in contact. There exists of course a general human procedure guiding the process of learning a language. Some of these "universal" peculiarities can be discovered in the grown-up as well as in the child

who is learning his native tongue. (For instance "contamination" - due to language interpretation by learners without a high degree knowledge of the entire system [Slama-Cazacu, 14], or the "regularization" of language, i.e. the generation of forms deviant with respect to the thesaurus of the respective language such as it has historically developed, but which seem "logical" to the human being - child or adult - who, having only a slight knowledge of this thesaurus or of some of its parts, produces forms on the basis of paradigmatic rules he has formulated by himself. Errors are mentioned such as: go/go-ed [instead of went], or spend/spend-ed [instead of spent] etc. both in the process of learning English as a foreign language by grown-ups [Dušková, 4 pp. 19, 21], and in child language acquisition [Brown, 2 p. 31]. Or, in Romanian-speaking children, from the present tense sînt ("I am") aberrant imperfective forms such as sînteam, sînteai... [instead of eram, erai... ("I was", "you were")] are produced; it is possible that, in the process of learning Romanian by foreign grown-ups - when dealing with a wrongly organized handbook and, probably, with non-Indoeuropean language speakers, the same mistakes should appear.) CsA conducted on the basis of an in abstracto description of the two systems is unable to discover such sources of errors, hence it proves insufficient. VIII) Finally, in spite of all the limitations of a too brief discussion, I must mention here the problem of one of the fundamental concepts underlying CsL, namely a psychological concept, that of transfer (with one of its aspects, interference). Reliance on a psychological concept, uncritically adopted, not sufficiently evaluated in relation to the evolution of modern psychology and of psycholinguistics, constitutes one of the weak points of CsA (I mention that in psychology one says that "transfer" exists - defining it through its effect - when the progress achieved during the acquisition of a habit or the existence of a set of acquired habits, facilitates the acquisition of some other habit, more or less similar. This phenomenon

is described in terms of negative effects of transfer or interference, when some previously acquired habit causes a decrease of efficiency while learning some other activity.

The stereotyped application, by specialists in other fields - linguistics for instance -, of old concepts of psychology, is often dangerous. Psychological science has evolved, some of its concepts have been modified or have disappeared, or, in their old form, no longer fit the system of knowledge - itself evolving - of other sciences, here linguistics. This is what we notice, on a closer examination, with respect to the concept of transfer-interference.

I cannot here discuss it in extenso. However, it should be mentioned first of all that in modern handbooks or fundamental dictionaries of psychology, or studies by well-known specialists, transfer is considered a "controversial concept" (Drever, 3p: 302) - because, for instance, it is explained by contradictory theories -, or a "hypothetical concept" (Oléron, 10 p. 116 - in the up to date Traité de psychologie expérimentale, 1964), since its existence is inferred uniquely on the basis of effects observed in situations where two tasks occur in succession. Last but not least, it is concluded (Jakobovits, 5 p. 24) that review of the literature on transfer leads to "pessimistic" conclusions, since great disparities are observed between data collected in the laboratory (where certain tasks are used) and data collected in real life where other variables occur - such as motivation -, and the very tasks, which the subject has to face are often of a different nature; consequently, principles established in the laboratory are often irrelevant in practical situations. It follows therefore that CsA is based on a controversial and hypothetical concept (employed nevertheless to explain and predict the phenomena in the language-teaching process).

The stereotyped use of this concept, without evaluation of its validity, is often associated with its application in an old-fashioned form, owing to the oversimplified model it reflects. Anyhow, if it still must be used, the concept of transfer-interference must be subjected to fundamental revisions, because it refers to complex phenomena, in which one can notice, for instance, that mutual influences, bidirectional, are exerted on the learner both from the base language to the target language, and from T to B - see Schema 2a), a fact that cannot be explained by the simplistic model, in which transfer operates unidirectionally (the succession from one skill to another, from B to T). Moreover, it refers to complex phenomena, in which different effects may often result from "very similar transfer situations" (Oléron, 10 p. 119). Consequently, this concept does not allow the formulation of principles having the status of a law, with a high degree of predictive power. As a matter of fact, this concept also involves a very critical problem, that of establishing what is, in fact, "similar" and what is "different".

3. The outcome of our examination of contrastive linguistics and contrastive analysis was not only a critical discussion of aspects which are weak and even "dangerous" in practical application, but also the formulation of some principles, constituting in fact a reformulation of contrastive theory and methodology, in what we called "contact analysis" - the analysis of the phenomena which appear during the meeting, in the learner, of the linguistic systems (base language B - target language T) implied in the process of foreign-language learning/teaching. This is an attempt to supply a theoretical foundation and a methodological system to research in which contrastive analysis is involved, research which has usually consisted of an in abstracto comparative description of the two systems.

3.1. The conception which is here briefly presented takes as its starting point the analysis of the situation in which the process of foreign language learning or teaching occurs, and in which, especially, human beings as such (and not "abstractions") are involved.

What are the components of this situation? What occurs there? In a brief, non-technical formulation: something (a verbal repertoire) is transmitted by someone to someone, who already possesses an analogous repertoire.

3.1.1. What is "transmitted" to the learner is not the T system in the meaning of a language (L), the abstract entity (see Schema 1). Obviously, L as such is never encountered anywhere, in a concrete space, by speakers, learners, or linguists - any more than one encounters "somewhere" the abstract categories of space and time. The linguist himself arrives at a knowledge of L indirectly, par ricochet, as a logically derived phenomenon, on a mental plane, from the phenomena to be found at a lower level of abstraction, namely from speech (the Saussurian parole, P) that represents L at a lower degree of abstractness, at the level of the community. More correctly speaking, however, the phenomena which we encounter in concrete life are the various individual linguistic systems (ILS), of every speaker, represented in the momentary act of communication by the individual verbal events (IVE). Every person possesses his own ILS, resulting from a long and never completed process of acquisition, on the basis of personal selection and storage from linguistic stimuli offered by his speech environment. His first ILS is his "mother tongue".

Schema 1

L

P

ILS

IVE

L, P, ILS, IVE constitute what I personally have named, in more recent studies (16; 17), the various "code levels", which must be taken into account in linguistics, especially when speaking about a concrete plane of communication, such as that of language-learning or -teaching. Every code level is the result of a choice-process, which explains the passage from one level to another. So-called "language acquisition" is a long-term, continuing process of selection from L (through P), having as a result the ILS's (from which are selected the messages of given moments - the IVE's). Since psycholinguistics is properly concerned with ILS (and IVE), obviously a psycholinguistic approach is required for adequate study of the process of learning and teaching foreign languages.

Thus the first principle we wish to underline is the necessity of taking into consideration the existence of different code levels, and we stress the fundamental role of the ILS and IVE levels in the process of language-learning/teaching.

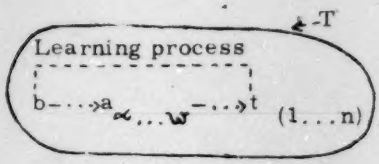
3.2. Let us now transpose the process of foreign-language learning into our terms. As CsL illustrates (in its traditional form and without exploring the implications), in this process at least two systems meet, coming into contact: a base language, B (usually the native language of the learner), and the target language, T (the foreign language he is learning). Where does this contact occur, however? Not, as is supposed in the literal application of CsA, on an abstract level, in vacuo or, at any rate, "outside the learner" (see Schema 2a), but "inside", within the learner, in discenti (see Schema 2b).

Schema 2a. Phenomena involved in the in abstracto contrastive study

B - T or B ↔ T	Language level

Schema 2b. Phenomena involved in the in discenti contact analysis

(B)



As a matter of fact, in the reality represented by Schema 2b, i.e. if we refer to the learner, the base system of the learner is not B (at the language level), but the individual linguistic system (b) of the learner. Similarly, in the process of transmission proper, the target system is not T, but the parole level of T or, with reference to a teacher or other sources of T messages, ILS's, or even IVE's (1...n). The result of this contact in the learner should be progress towards t, the consequence of a selection of T elements by the learner (Schema 2b). Thus learning should be analysed as the contact of systems (at a special code level) in the learner, a function of filtering processes depending to a high degree on human constants and also of the coercion exerted by the linguistic systems to which the individual is exposed, as well as of personal psychological characteristics (a specific capacity for perception, of thought, personal motivational determinants, etc.).

The second principle of this conception consequently implies a characterization of the learner as the site of the B-T contact, and stresses the necessity for pursuing the consequences of this fact, namely taking into account the individual psychological particularities in this process. CsA should be also a contact analysis in discenti (in the learner).

3.3. The third principle - in close connection with the first two - points to the learning process itself, which occurs in the learner, to the psychological features of this process, and, in particular, to

its dynamic nature (with the resultant formation, as W. Nemser showed in previous studies (6), or approximative systems representing stages in the progress of foreign-language learning).

The foreign language is obviously not acquired by an imprinting of the entire target system at once or by instantaneous storage. The essential characteristic of the process of learning a foreign language is a gradual, a dynamic storage, consisting of several stages or perhaps even of transitory systems. The several stages of the storage process include a mutual adaptation of elements, under the polar influences of B and T. It is this chain of ephemeral storage units that constitutes the progression towards T through transitory approximative systems. These systems are a variety of ILS, namely the learner's individual "version" of T (t - see Schema 2b), formed during the process of the acquisition of T - which is the objective of this process. We consequently suppose that between the inception of his learning of a foreign language and near-mastery of it, the learner passes through stages, typical of learners with his linguistic background, during which he employs language systems at different degrees of approximation to the language he is learning (7 p. 3).

Like other ILS's, the approximative systems that appear in the process of foreign-language learning can also be viewed in their aggregate at a higher (more abstract) code level, as constituting an L, i.e. A - the abstract system characteristic of all persons who learn the same language against the background of the same base language, under similar conditions. Also like other ILS's, approximative systems are fragmentary or partial systems in relation to B or T (or A); they, too, are characterized by sui generis organization, containing elements both from the base and the foreign language, as well as some elements proper only to the ILS of a given individual.

The notion of approximative systems is synthetically defined by three aspects: a) When the learner is attempting to communicate in a foreign language, he employs a linguistic system, a, distinct from B and T and internally structured (Schema 2b). b) The a's represent successive learning stages in evolving series (a...) extending from a learner's first attempts to communicate in T to near-perfect use of T. Every stage shows a systematic influence from B, and also represents accretion of elements from T; these stages are hence definable qualitatively and quantitatively. c) The a's of learners in the same contact situation (i.e. under the impact of the same B and T), and at the same level of learning, roughly coincide (major variations are due either to differences in the linguistic model offered as T, or to differences among the base ILS's of the learners or to differences in their psychical characteristics, or to differences in their specific stocks of knowledge, including other languages already learned etc.).

Hypothetically, approximative systems have a structural coherence, although they are frequently subject to rapid evolution, to momentary partial changes and radical reorganization. As structural independent entities, they should become the object of further synchronic, as well as diachronic examination, in terms of B and T.

4. The methodological consequences of the conception presented here derive logically from it, and are of course anticipated as a necessary implication, when dealing with a conception directly related to applied linguistics, to the practice of language teaching. We will not, however, discuss these consequences here at length, but shall only mention them briefly. It should be underlined, first of all, that it is logical, economical and, very probably, more efficient for the practical situation of the classroom, to always have in view the learner, integrated in his determined context.

If CsL is a field concerned with applied reality, if its aim is to assist language learning and teaching, if it must be concerned, in its final results, with the reality of language learning/teaching - where the two systems meet in the learner -, and if it has to assist the facilitation of this process by predicting the points where the crossing is painful (the "sensitive points") - then it follows logically that it should take into consideration that reality also during all its methodological steps, preliminary to the moment when it should offer its contribution to the classroom (in the preliminaries consisting of procedures for confrontation of the two systems). Hence, the methodology should start by taking into consideration that real situation from the very beginning of the research.

4.1. CsA constitutes the first step towards practical application, the second being application itself of the results of research in the teaching practice. As a matter of fact, CsA is anticipatory research, preceding the very methodology of language teaching. We will give here very briefly some principles of this first step, which is meant to lead to a deeper knowledge of the particularities of the contact process between the two systems during the learning of the second language.

We retain some objectives of classical CsA: to explain and predict language-learner behaviour, with the concrete aim of developing a more scientific approach to the process of foreign-language teaching. However, we consider it necessary to approach the reality of this process from a broader perspective than that of CsA. The procedures we are suggesting are intimately connected to the conception of "in discenti contact analysis", taking into consideration what occurs within the learner, the site of the contact of the two systems, during his progress through the various stages in the sequence of his approximative systems. Consequently, instead of trying to explain and predict the learner's

behaviour itself, we now realize that other levels and variables must be considered. These include the specific ILS of the learner, the ILS's which have furnished models for him of the T, the fact that these systems meet within the learner, as well as the consequences of the fact that this meeting will reflect general human characteristics relevant to the dynamic storage process.

From the beginning of the research, one will take into consideration what occurs in the learner, comparisons being made afterwards between D, t and a.

4.2. Concretely speaking, the procedure of a research as intended here consists of two essential phases: (4.2.1.) The selection of research topics, through objective procedures to a great extent experimental, applied to a great number of learners at different stages of language-learning, and including as well statistical processing. These topics will reflect the "sensitive points" of the contact between the two languages. Such investigation is intended to disclose all deviations from the norm of the T system (and not merely reciprocal influences between the two languages). (4.2.2.) In-depth studies of the topics furnished by the preliminary processing of the data. From this point on, research can be divided into two parallel processes: one - the "traditional" confrontation of the two systems, independently of the learner, but having in view the hierarchical system of errors which have appeared in the first phase of the general research and a second process - intensive application of psycholinguistic experimental techniques. This derives from a personal hypothesis that in the future it will be sufficient to begin with the establishment of a hierarchical system of errors, and only after that, in the second phase, to perform the nonexhaustive comparative study of the two systems. Till this hypothesis is

validated, however, through future investigation (with the help of research results obtained by the Romanian-English contrastive studies in progress in Bucharest), it was accepted as the strategy of such research, to perform as early as the first phase a parallel study - the establishment of the hierarchical system of errors and the in abstracto contrastive analysis of the two systems -, making certain, however, to take into consideration in the second phase the results of both procedures. At any rate, we suppose that at the present stage in the development of contrastive linguistics, it is absolutely necessary at least to combine the deductive method with the inductive one, with the aim of corroborating the former, if not directing it as well.

4.2.1. As a logical consequence of the criticism levelled at the classical CsA and as a consequence of the conception I described earlier, we consider that the selection of topics for study constitutes in itself an important stage of the research and that it must have the validity of any scientific procedure. It is necessary to substitute objective procedures aimed at topic selection for those based on subjective criteria (such as intuition, unsystematic observation, personal predilection, mechanical application of typological criteria, etc.). The analysis of the systems in contact within the learner implies as a starting point the selection of topics on the basis of reactions of the learner himself, having permanently in view both systems as wholes, and the individual with all the psychological implications of his personality. Consequently, the preliminary research - and in fact the first step in contact analysis - must take the form of systematic observation of learner behavior. Experimental tasks will include dictées, compositions on given topics - using sequences of pictures -, sentence completion tasks, recorded dialogues, etc., aimed at eliciting responses representing a large "éventail" of categories pertaining to both systems (since restricting

our attention to the categories of T might exclude examples of distortion with their origin primarily in B: for instance, the nonexistence of an aspect category in English does not exclude prediction of distortions in the learning of English verbs by Serbo-Croatian subjects, in whose B aspect exists). The objective of this study will hence be to find "sensitive" points of contact between the systems, i.e. sites of contact between these systems within the learner, resulting in distortion or blocking of the learning process. The processing of data will lead to establishment of error systems typical of learners in a given contact situation. These systems are established in terms of the errors' hierarchical significance, based on frequency and degree of negative communication value. Such procedures will provide us with a means of selection, through objective criteria, of the structural aspects of the two systems for the strictly linguistic procedure of comparative analysis. The data will also be used in the second phase, in the research proper, for the in-depth study of these problems.

4.2.2. The in-depth study will consist in: a) analysis of the "sensitive points" where distortion has occurred, due either to the contact between the two languages or to other determinant factors; b) the study of the approximative systems at various levels of learning; c) the investigation of learning variables, at the individual level, perhaps also permitting us to extract certain "universals" of learning; finally, d) explanation and prediction of the succeeding stage of the approximative system sequence, and even, eventually, of the entire subsequent series of approximative systems of a learner, on the basis of contact analysis of the two systems (b and t of Schema 2b) and of information concerning previous stages of approximative systems.

The methods and procedures we are suggesting with this aim are: linguistic analysis proper, i.e. comparison of the two systems;

experimental linguistic studies (experimental phonetic research techniques etc.); observation and experiments in the classroom; psycholinguistic experiments (also using appropriate devices, for instance those presenting the subject, for measurable durations, with certain words, sentences etc. or measuring reaction time, as parameters of perception processes, or of memory retention in language contact conditions, etc.). These procedures will be used in research at the phonetic, grammatical and lexical levels. We are also suggesting special psycholinguistic research devoted to the study of the learner's reactions during the contact conditions (the learner's awareness of the systems in contact - and of his approximative systems -, the awareness of his own stage in the learning process, the role of his personality characteristics and of motivation, of his other stored languages etc., the "universals" of learning - as a common basis in this process, for all normally developed human beings, offering typcial reactions, abstraction being made of the systems in contact -, etc.).

5. Conclusions. Contact analysis - the analysis of systems in contact in the learner, during the process of foreign-language acquisition - is an attempt to overcome certain fundamental shortcomings of CsL and CsA. The methodology based on the principles of contact analysis in discenti should allow us - once we know the base and target languages as well as certain general and individual characteristics of the learning process - to predict and explain the stages of this process, as well as the succession of the approximative systems in their progress toward the target language, and to facilitate and accelerate this progress. Similarly, we can suppose (cf. also Bourquin, 1 p. 18) that generalizations should be reached which will facilitate access to a "typology of human behaviour" in the process of foreign-language acquisition.

The approach presented above has as its characteristics: an attempt at offering a theory and a systematization of methodology for contrastive studies; the establishment of a closer connection between research and the events occurring within the learner during language acquisition; the stress laid on the dynamics of learning; the primary position granted to the inductive method or, at any rate, the corroboration of the deductive method through the inductive one; the grounding of the research on scientific objective procedures; the effort to enlarge the framework of a simple predictive and explanatory analysis of the process of the acquisition of a particular foreign language to include the establishment of certain general principles of language learning - with the possible disclosure of certain "universals" of learning which are not necessarily related to contrastive phenomena.

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DISCUSSION was opened by the Chairman, Dr. László Dezső (Budapest)

Ljiljana Mihailović: You mentioned the choice of the model, but in the course of your presentation you did not say which one you are going to use.

T. Slama-Cazacu: Yes, I mentioned the problem of the model in criticising the fact that contrastive studies or contrastive theory, if it exists at all, does not give any indication, any opinion about choosing one or another. But I also added, if I may remind you, at the beginning that we did not intend, at this point in the elaboration of our principles, to indicate one linguistic model or another. May I only say what everybody knows, and this also appeared from the discussion yesterday and the day before yesterday, that no linguistic model, no linguistic system has proved its power in practice. Second, from this point of view we do not have the possibility of indicating that this model or that is better, even in confrontation with our principles. I would only say that the following are logically our principles: in trying to choose one theory or another, one should have in view the reality of the classroom from the beginning. I come again to my syllogism: if you agree that contrastive linguistics is an applied field, it should have in view the improvement of foreign language learning and teaching. As such any linguistic theory that could be chosen should be confronted with this reality from the beginning. Is it suitable to the teacher, can the teacher understand it, is it suitable for processing the material to be given to the pupils, has it proved its validity confronted with the psychological reality? Because there are many psycholinguistic studies aiming to validate some of the aspects of transformationalism for instance. And also, is it economical?

M. Vlatković: If I am not mistaken Dr. Slama-Cazacu tries to emphasize that classroom reality has been left out. I do not think I am speaking for myself only but for at least the whole Yugoslav project, and I am sure the same applies to all the other projects: we all live in the classroom, and then in the evening we do our contrastive analysis. And we all go round with little writing pads and put down all the mistakes that occur in the classroom. They are not systematic testing, but they are what occurs in the classroom when you ask the student to give a grammatical rule and he tells you about conditional clauses and then he says "If I would have been asked" or something like that. In saying the rule itself he makes two or three mistakes. And I am sorry I did not bring that with me so that I could show you the actual mistakes of our students in written and spoken language. We also do analyses of our examination papers on a more systematic basis. The first year has its own examination, the second has its own examination and the final, diploma examination is also written, so there always are a mass of about a hundred or a hundred and fifty, sometimes even more, written papers. So none, I think, of our conclusions in our work is really in vacuo or in abstracto; they are all based on actual things heard or written in class.

T. Slama-Cazacu: I have been given this argument several times by some of our members of the staff of the English department, and some of them, when I explained to them that experiments should be done, told me "But you have experience in the classroom". I am sure that I do not have to dwell upon the difference between experience and experiment here. You understand that it is quite a different thing. It is experiments in controlled conditions that should give the possibility of keeping in hand the variables in a situation. Secondly, I am sure that much of what has been done up to now in contrastive studies is

due to the experience teachers have in the classroom; this helps them to keep in contact with reality and maybe to modify or correct some in abstracto studies. Thirdly, what you are doing when writing in your copybook is your personal experience in the context of your classroom with a small number of people and having a non-systematic possibility of observing these errors. What I am advocating is scientific observation and experimentation in order to give us the possibility of arriving at generalizations on a great number of individuals taken from different contexts, having different teachers; the teacher is also a model for the language learner and maybe some of what appears in the classroom is due to the personal individual linguistic system of the teacher himself. Anyhow I advocate such an analysis in different contextual environments, meaning by this different classrooms for a great number of individuals allowing statistical processing, and, this is maybe the most important point, establishing the frequency of the errors in a hierarchical system of errors, not just an error analysis such as I have read many papers about. And last but not least, I advocate that the choice of topics in all projects should not be based on the personal motivation of a researcher, but from the beginning on this hierarchical system of errors. The research should be directed first of all to the most frequent errors on the top, and then go down little by little, not neglecting anything of course. My opinion is that such a study is also more economical because it spares time and energy. I did not want to neglect the experience in the classroom, but what I advocate is another thing.

M. Mikeš: First of all my discussion will be to contribute something to what Prof. Slama-Cazacu has told us about systematic checking and

systematic investigations, taking into account psycholinguistic factors, at least I think that they are psycholinguistic factors. But I must tell you in advance that our project, which is Hungarian and Serbo-Croatian contrastive grammar, is in a specific situation because neither Hungarian nor Serbo-Croatian are, strictly speaking, foreign languages. They are languages that are spoken in the environment of the learners, in bilingual surroundings. So we must include bilingualism as a very important phenomenon in our research, and therefore, whether we want to or not, we must take psycholinguistics into account. I tell you this in advance because I am not sure that this could be done in a project let's say English - Serbo-Croatian or English - German; the situation is not the same. Anyhow, I'll give some brief ideas of what we are doing. We are using informants, and not single, individual informants, but groups of informants Now, how do we determine a group language system? We have informants of L_1, of the first language, and of L_2, the second language. Our tests are either in Hungarian or Serbo-Croatian because our project is two-directional. So if our test is given in Serbo-Croatian then the group of informants of L_1 are Serbo-Croatian informants, and Hungarian will belong to the L_2 group. If our test is given in Hungarian then the L_1 group is Hungarian and the L_2 group in Serbo-Croatian. Now, the bilingual surroundings are not the same in all the regions of Vojvodina, our province. We have regions where Serbo-Croatian is predominant, we have regions where the two languages are approximately balanced, and we have regions which are predominantly Hungarian. So if Hungarian native speakers live in predominantly Hungarian surroudings they form one group of informants. Then we have Hungarian native speakers in a Hungarian - Serbo-Croatian environment, and we have Hungarian speakers in

a Serbo-Croatian environment. And two will be Serbo-Croatian native speakers in a Serbo-Croatian environment, then Serbo-Croatian speakers in a Hungarian - Serbo-Croatian environment and Serbo-Croatian speakers in a Hungarian environment. We suppose Serbo-Croatian speakers in a Hungarian environment and Hungarian speakers in a Serbo-Croatian environment are the most bilingual informants, because there the native language and surroundings have approximately the same influence. Age may also play a role, and in most cases it does, because let us say a Hungarian child of seven in Hungarian surroundings is mostly monolingual, but a ten-year-old child, or a young man of fifteen or sixteen, may be already bilingual. That is what I was going to say about the tests we are doing and at least supposing that we are introducing psycholinguistic factors. The other point I wanted to emphasize is that as a psycholinguistic factor we also include researches in child language. Yesterday I said that there is no use in saying that acquisition of the first language goes in such and such a way, and we may apply the same to the second language teaching. And now, why and how do we think that child language investigation may be useful for contrastive linguistics. In child language we may discover many pretransformational forms and many before-embedding forms of, let's say, noun phrases, which are very instructive for our theoretical work. So we find some, let us say, affirmation of our theory or explication of it. I will give only a very brief example of what I mean. For instance, in child language we find such a sentence block as "Tu mama, nije mama" ["here mummy" and "mummy not"]. This should be a pretransformational form of the negative sentence. The transformed form would be "Tu nije mama" or "Mama nije tu" ["Mother is not here"]. So this is a pretransformational form in child language. And now if a grown-up person

learns Serbo-Croatian as the second language, it also may happen that some pretransformational form occurs in his speech. But such a type would never occur because this has already been formed in grown-up people. For instance, this mistake may occur in an adult: "Ja ne hoću da pijem vina" ["I do not want to drink wine"]. (In Serbo-Croatian "ne hoću", I do not want, gives the form "neću".) In Hungarian "Nem akarok" ["I do not want"] remains, they never form a new form.

J. Filipović: I would like to ask a question and to say something about the error analysis done in the Yugoslav project. Mrs. Slama-Cazacu has mentioned controlled experimenting as one of the ways of doing the error analysis and applying it in contrastive linguistics. What I am interested in is how the Romanian project is going to organize this controlled experimenting, and how the topics of this controlled experiment are going to be found. I would like to say just a few words about the organization of our analysis, because error analysis has been mentioned just as error analysis and nothing further has been said. When the material for our analysis was compiled, it was compiled at three different levels of teaching and learning English, which means different classroom situations, different teachers, and different ages of pupils. It was compiled to get spoken language from the learners of English in three temporal situations, present, past, and future. And when the first batch of material was compiled we thought that the material could not satisfy us from the practical point of view; we knew there are other fields in which errors occur. So we organized an additional compiling of material: the recording of spoken English of our pupils was done in such a way as to get those fields in which errors occur. Let's say, when we did not have enough material on futurity,

we went in search of that from our pupils. We would very much like to know if you have any ideas about organizing controlled experimenting.

V. Ivir: May I just add two points to what Miss Bilinić has just said? In this recording business, first of all we went in search of the items we knew are errors and we did not find enough material. That was one thing. Another thing was that we organized this whole project, or semi-project, in such a way as to cover the whole of the English language taugt at these different levels. And then we thought that some of the areas, particularly theoretical ones, were not covered in the material: it was possible that no errors would occur in that particular segment, but we were not sure. In what way did we control the situation? Very primitively, I must say: we asked questions or created situations in the classroom which we hoped would produce linguistic responses in the areas where we needed more material. For instance, we noted that we lacked material in the field of continuous present tense. In that case what we did was to go running up and down the classroom so that the students would be able to ask questions or describe actions in this particular tense. And then we could see whether the tense was used correctly or incorrectly. We would not claim any sophistication for this, but I would like to hear in what ways you can be sophisticated.

T. Slama-Cazacu: I am very glad to hear about your own experience in this field. We will get many suggestions from your experience here and in other projects as well. I was very interested to read the last report produced by the PAKS project in Stuttgart that contains only the material collected from error analysis but without establishing a hierarchical system of errors or basing all the project from the beginning on it. Now about these experiments

you have made. First of all may I ask how many topics you used?

V. Ivir: About 300 altogether.

T. Slama-Cazacu: In how many situations, in how many contexts?

J. Bilinić: In four basic situations: grammar school, university students and A-V courses of two different types.

T. Slama-Cazacu: We the teachers knew that many errors would not appear, we had this experience from other projects, other research. Many errors do not appear especially when you are provoking the subject to answer a structured test. We also knew that in some situations some errors appear and in others they do not appear. That is why I underline again that we must use a great number of subjects and that the data should be statistically processed. In the beginning we suggested, let's take the university admission examinations and let's all correct them and see what the errors are. Without any statistical processing this did not give us anything, for me anyhow. So statistical processing is very important in such a case. Then the structural tests do not always give the results important for such an error analysis and for such an aim. I will tell you some details about this in the other report. Now, just for these experiments you made here and in connection with what Dr. Mikeš told us about this very interesting and important bilingual problem. I do not know why, but it is thought that in a bilingual situation or when child language is involved psycholinguistics is more useful, or is fundamental. Why not in any language situation, in any communicative situation, in any language learning even by grown-up people? It is as if a grown up had no more psychic foundation, psychic processes.

219 M. Mikeš: May I give a brief answer. I did not mean that only in our situation can psycholinguistics be used. But the psycholinguistic approach in

our situation cannot be the same as in yours.

T. Slama-Cazacu: My words were challenging, provoking questions, because I expect such a question from many people, from many teachers, from many linguists. But one problem now, about the individual linguistic systems because this could be an explanation for many of the errors. I say that in any situation whatsoever we start from an individual linguistic system. Even if you talk about the group linguistic system, you start from many individual linguistic systems. You must arrive at the group linguistic system, and we also want to arrive at such a higher level which I may call the level of parole Saussurienne, a generalization of the linguistic system, at the level of collectivity, of the community, the group. But on the contrary, when experience in the classroom is involved, as in the example we were given by Mrs. Vlatković, there only individual linguistic systems are involved. We are not sure that one can arrive at a higher level of generalization. With the statistical processing of data and so on we want to arrive at a generalized level, aiming to arrive furthermore at the language itself. If I may show you briefly my model of the code levels, at a higher level of generality, of abstraction, in the language itself, then a more materialized, concrete level of language Saussurienne that is a realization of language at the level of community. Then there are the individual linguistic systems, and the most concrete are individual linguistic events or facts. Transformational grammar remains, I may say, at the individual linguistic events when dealing with performance and at the individual linguistic systems when dealing with competence. But the methodology itself includes only the event here, because informants are used and sometimes the only informant is the linguist himself; one does not arrive at a generalization

of data and so on. This is, I think, the main inner contradiction of the transformational model: one has the impression that one is dealing with very abstract levels of language itself but in fact one remains at the individual linguistic systems or individual linguistic events, because the methodology is such an egocentric one.

E. König: What exactly do you mean by the hierarchy of errors? Does statistics only come into this, or can you make such a case according to linguistic principles as well, do you have linguistic theory behind your classification?

T. Slama-Cazacu: What I mean by "hierarchical system of errors" is just establishing a system of errors in accordance with their frequency and also their communicative value, so that we will have the most frequent errors at the top and we shall arrive at the most typical errors of Romanians who are learning English. This hierarchical system is also based on a linguistic classification of errors. Prof. Agard functioned as a consultant last year for the Romanian project and he suggested such a classification. In this system you have the possibility both of establishing the frequency of these errors in accordance with the largest classes and with the most detailed, and also in accordance with the frequency by individuals and by types of errors themselves. Is that clear?

E. König: Yes, it is clear, but it is difficult to see how these various principles, token-frequency, type-frequency, and linguistic communicative value, will integrate.

T. Slama-Cazacu: The communicative value of course involves a qualitative analysis and this was added in order to reduce the dangers of a too

formalist approach, i.e. statistics. Personally in psychology I advocate qualitative analysis especially and not mainly statistics. But in such a case I think it necessary to have a statistical analysis tempered by a qualitative, and this qualitative analysis will serve only as an auxiliary to the statistics. The communicative value is difficult to establish on a statistical basis, it could be done but it would take a very long time.

W. Browne: On what principles is the list that Prof. Agard drew up based?

T. Slama-Cazacu: This involves especially the second report, the practice of our project.

R. Filipović: Have you already studied the methodology by which we could establish approximate systems?

T. Slama-Cazacu: Maybe this is the most difficult point of our theory. I feel, not only intuitively but also logically, that approximative systems must exist in the process of language learning. I would prefer to speak for the moment more about dynamics and more about stages; but as we speak for instance about deep structure and surface structure and we do not know exactly what they are, all the same even I who am not a transformationalist use these terms because they enter into the code of everybody, every linguist or psycholinguist. It is the same with approximative systems. We shall understand each other if I speak about approximative systems, but what they are and if they exist in reality I am not sure. I am not sure that in this dynamics there are systems. This is a hypothesis for the moment, and it must be validated, or not, first of all by experiments. Anyhow I am sure, and this I can prove, that dynamics exists and stages do exist. Whether these stages are to be considered as systems,

this is my personal problem. And one of the reasons why I wanted Dr. Nemser to be here is that he advocates more, maybe he does not know it but he advocates this term and this concept of approximative systems more than myself. For myself I have doubts for the moment, because as an experimentalist in psychology I must submit everything to experiments or systematic observations.

R. Filipović: I thought that in our work we could establish one system that would be typical for, let's say, Serbo-Croatian speakers learning English. In that system we would quote all the difficulties and problems that one meets with when learning English. When you spoke about stages existing according to the pupil, the circumstances under which the language is taught, the teacher, the environment, and so on, could these stages by summarized and an artificial system established that would be used for practical purposes? Would it be possible to establish this system on three levels, or even four: phonological, morphological, syntactical, lexical? If so, then I think that we could probably establish such a system as a summary of our error analysis. I would make a comparison with our study of languages in contact where we also speak about coexisting systems, between the system of the first language and the system of the second language.

T. Slama-Cazacu: Yes, a general approximative system, using this not in the plural, an approximative system of the Romanians who are learning English, I would theoretically admit; and this would not be a hypothesis. The hierarchical system of errors will enable us exactly to establish a system that is an approximation to the English spoken by a native. Now if we think about the plural - approximative systems - this is a hypothesis for me and here I am not sure. But I would say that some indices exist that this hypothesis would be

validated, maybe not in accordance with the notion of systems connected with time, chronologically, but there should be in the beginning such an approximative system that afterwards no longer exists. For instance, such errors as regularization or generalization, disappear afterwards and this could be an approximative system in the beginning. Errors of the type go - goed instead of went are what I am calling regularization of the language. This concept is used for child language; I have many records where children regularize Romanian conjugation. This could be an interesting example for you: the first person of the present is eu sînt "I am", the past tense is eu eram, tu erai, and so on; now Romanian children form eu sînteam, tu sînteai, and so on. (Of course you recognize, if you know Latin, what the evolution of our language has been.) The child has learnt the first person present and afterward he generalizes. This process is called in psychology of language "the regularization of the language by the child", in other terms it is also called "generalization", and in our terms of contrastive linguistics in accordance with the notion of approximative systems it may be called "using prior learning in order to produce new forms". I expect such errors in foreign speakers learning Romanian. If a wrong method were used, and if they did not know Latin and so on, several experimental conditions, I suppose that my hypothesis could be verified. But you have the example in English with goed - such errors disappear afterwards. Maybe this is the first approximative system, when prior learning is used in order to overgeneralize. This would be an argument to validate this hypothesis. For the moment I cannot subscribe entirely to this because I have no proofs that the system exists in the sense of a structure.

A. de Vincenz: I think this example confirms what we said yesterday. There are some errors which will be made by children and by adults and some errors that will not be. I think this thing could not happen in any European language because in all European languages you have different forms for the past tense of the verb to be and for the present tense of to be, but it could happen in some non-European languages, I don't know. The other point is this beautiful schema: L, P, ILS, IVE, I think we could call it neo-Saussurian. I would like to ask Mrs. Slama-Cazacu if it's not too good to be true. These IVE's, you can put them on slips and handle them, but how are you going to reconstruct the ILS? And is there any use in reconstructing it? I suppose that a teacher, if he reconstructs anything from his slips, will reconstruct general types of errors, so you have no place, no room for your ILS. Then the other topic is a more general one. I think it's no accident that some people have put good questions about your theory. In sec. 5 you say "primary position granted to inductive method...", do you mean that you want to have induction first and theory afterwards? I would agree with the second part of the sentence "corroborat of deductive method through the inductive". Does it mean that you'll have your theory afterwards? Or if you have your theory before, then you have no inductive method any more, you have the deductive method. Now a general question, I take it from the other paper but I think it belongs here. You say "The corpus of analysis will consist of a scientifically (on the basis of frequency) selected vocabulary of several thousand English items". I am slightly uneasy about the scientifical side of frequency. And the last point, you propose that a theory of learning should be set up for studying contrastive linguistic learning. I think it's an excellent thing; I propose you should adjoin to it a theory of unlearning. I

have some friends who are theoretical physicists and they told me that the greatest difficulty with their students is unlearning what they have in physics in the secondary schools. Mathematics can serve but not physics. And I personally think that we have difficulties with our students who have learned lots of useless things about linguistics in secondary school which date from fifty years ago.

T. Slama-Cazacu: I think that these are very stimulating questions and I am sure that coffee helped very much. About the first part, that such errors would not appear in Europeans - that's what I expect my experiments to confirm. I will choose some subjects not pertaining to this branch and maybe there..... Now, how to reconstruct the ILS. It is not possible from one point of view because the ILS is a dynamic concept, it is a dynamic system, it is never achieved, we are always in the course of rearranging and of modifying and of completing our own ILS in the native language. So, if dynamics is difficult to put in something concrete, it is impossible to reconstruct the ILS, even for foreign-language learning. But from the other point of view it is possible to reconstruct it because the error analysis and the sequence of approximative systems will give us individual linguistic systems at a high level of generality of this community. In this sense they will be reconstructed via parole, the level of parole of the individual linguistic systems at the level of the group. It would be also possible to reconstruct it via the individual, following his evolution longitudinally. Now this is a very interesting question about the inductive and deductive method. Of course, we advocate beginning with the inductive method, but I am in contradiction with myself because I am putting the theory in advance. However, it is the theory put in advance that indicates that inductive method

should be used, and this is a difference between the theory and the method, if you agree with me. So there is no contradiction, I feel, between what I said and what is written in my paper. The theory is that we should take reality into consideration, and it follows that the method itself should be inductive in the beginning, dealing with facts. And even if some deductive method could be used, and it will be used - unhappily I would add - in our project, it should be corroborated through the inductive method, this is what I intended to say. Now the other question concerns the project and the formulation "scientifically on the basis of frequency". We mean by this that it will not be processed impressionistically but on the basis of statistical processing. I do not say myself that statistics is equal to a scientific approach always, but in such a case it is, replacing an impressionistic or subjective appreciation of data. Now the theory of unlearning. In psychology we also speak about a procedure to make people forget something, the difficulty of breaking what we are calling a wrong stereotype. In the example I gave yesterday, if you give someone a wrong distorted sentence it is even more difficult afterwards to make him forget this and learn a good one. In such a way there could be a problem of unlearning or forgetting something. A theory of unlearning I think is a calembou a nice jeu de mots, fascinating to speak about.

G. Jakob: I would like to know something more about the process of abstraction from individual linguistic events to parole and from individual linguistic systems to a language system. I guess it is something like leaving out, dropping features from your description of forms and items. Could you please give some detail about this abstraction? Leave out the complication of the second language. Let's only speak about one language.

T. Slama-Cazacu: What are you giving us now are individual linguistic events pertaining to your individual linguistic system. Let us suppose that you are speaking German; it would be a materialization of your individual linguistic system. That is a selection of a language; language itself is never mastered by anybody, even by the most clever linguist. It is a selection carried on since childhood, and little by little the system of meanings is changed. I studied in the child this dynamics of modifying the meanings, and of course it is a slower process in the adult but it does exist, there is a modification all one's life. It is also at the level of grammar, and at the level of style. So in this sense I am speaking about individual linguistic systems. Now the level of language is another problem. I suppose that language itself as a concept should remain the object of linguistics, but we do not find language itself as an abstraction anywhere, just as we do not find categories of space and time themselves somewhere, they are categories of our mind based on generalization. I am entering into the field of philosophy, of epistemology, but I think they are connected with these problems. I have given a more detailed discussion in a volume devoted to Eric Buyssens, which appeared this year in Brussels, "Linguistique Contemporaine", where I speak about the code levels. That is not especially a neo-Saussurean approach, it starts from Saussure because everybody uses these terms in our code actually, but is in confrontation with the concepts of Coseriu. Coseriu himself is not a neo-Saussurean, so neither am I. I just start from these terms in order to show my position and the model I am working with. As a psycholinguist I must find the object of psycholinguistics, and the object of psycholinguistics is to be found in the individual linguistic systems and the individual linguistic events of the messages.

G. Jakob: That's understandable but it's not how I understand constructing or abstracting of these linguistic events. The language system is not dropping features but something like a union set, not an intersection but a union set. And would language still be a unified system? I could give some examples showing that it cannot be a unified system if it is a union set of items and rules of individual linguistic systems, because there are rules excluding each other.

T. Slama-Cazacu: As far as we are speaking in psychology of the general laws of the human psyche, we are also dealing with individuals all the same. There are common features that are basic for the human being that form the human psyche. There are basic features that pertain to each individual linguistic system and reflects themselves in each individual linguistic system. From another point of view there is a certain selection, but the background is language itself, otherwise we could not understand each other. If I can communicate with my colleague Chițoran in Romanian that is because I have my individual system, he has his individual system, but the background is the Romanian language of course, otherwise we could not understand each other.

G. Jakob: I would agree now.

M. Mikeš: I would like to refer to Prof. Filipović's remark about approximative systems or an approximative system. I believe in Dr. Nemser's theory that there are a series of approximative systems, but I would also agree with Prof. Filipović that in practice it would be advisable to simplify into one approximative system for two languages in contact. So you have an approximative system of Serbo-Croatian and Hungarian, Serbo-Croatian and English, Serbo-Croatian and French, and so on. But in this simplifying of the system I would

suggest that we make an order of error systems because there are error systems which appear at the beginning and last till the end, and there are some which disappear, and then there are errors that only get created at a higher level. So an order of error systems would perhaps help us not to get an oversimplified picture of an approximate system, to see it in its dynamism. So this is one thing. And then I may say, perhaps it's a little too far-fetched, in due time we may get universals in approximative systems, and there are systems of errors that are only typical for two languages or for a type of languages.

M. Vlatković: I was also wondering about approximative systems based on one language on one side and two other languages, for instance Serbo-Croatian - French and Serbo-Croatian - English. I have noticed, speaking with colleagues who teach French, that the same type of translation errors do not appear in English and in French. A friend of mine for instance tells me that mjesec dana (a month of days) occurs with a high frequency in French Serbo-Croatian speakers, they would say "un mois des jours", which I personally have never heard any of the English students say.

L. Dezső: We had two crucial questions: the first of them was error analysis and the second was the problem of approximative systems. I am aware that these two problems are closely connected. Unfortunately Dr. Nemser is approximating to Zagreb now. When he is here quite proximately perhaps we can go on with the discussion of this topic.

The Chairman here closed the discussion.

Tatiana Slama-Cazacu (Bucharest, Romania)

THE ROMANIAN - ENGLISH LANGUAGE PROJECT[1]

1. A large-scale project has been started in Bucharest, aimed at developing research activity underlying the teaching of English in Romania and at improving the teaching of Romanian to English speakers. The Project involves the participation of the University of Bucharest (through specialists of the English Department, the Romanian Department and the Psycholinguistics Laboratory), together with the Academy of the Romanian Socialist Republic (through the Center for Research in Phonetics and Dialectology), in cooperation with the Center for Applied Linguistics in Washington, D.C.

Specialists from other university centers in Romania will also participate in this project.

1.1. The objectives of the Project are:

a. the development of a contrastive analysis for use by Romanian teachers of English;

b. the organization of teacher-training courses for Romanian teachers of English;

c. the organization of intensive courses in English for Romanians intending to go to English-speaking countries for study and research.

The aims of the contrastive study phase of the Project are:

a) "to produce a systematic comparison of salient aspects of the sound systems, grammars, lexicons and writing systems of Romanian and English which indicates the psycholinguistic implications of structural differences and similarities between the two languages for Romanian learners of English and English-speaking learners of Romanian";

β) "to formulate the results of the contrastive analysis so as to provide the basis for more sophisticated and effective methods of teaching either language to speakers of the other (with English, however, viewed as the primary target language), and to illustrate these applications by the production of a set of specimen teaching materials";

γ) "to provide an opportunity to younger Romanian and American scholars for further professional development".

1.2. The Project began - after preliminary discussions - in autumn 1969. The first phases were devoted to organizational matters, to the discussion of theoretical and methodological issues, and were also aimed at initiating certain actual research activities.

2. The Rector of the University designated prof. Ana Cartianu as responsible head of the entire Project, and the President of the Academy designated acad. prof. Alexandru Rosetti - former director of the Center for Research in Phonetics and Dialectology of the Academy of the Socialist Republic of Romania - as responsible head of the first phase of the Project, the contrastive study. On the American side, Dr. William Nemser represented the Center for Applied Linguistics in Washington D.C. in this Project.

The directors of the Project are assisted by a team of scholars, consisting of the coordinators of the working groups to be described below.

Following preliminary discussions, the Romanian - English contrastive project assumed the following structure:

- A consultative committee for theoretical and methodological problems (conf. dr. D. Chiţoran, prof. dr. I. Coteanu, prof. dr. docent T. Slama-Cazacu, prof. dr. docent Em. Vasiliu, and representatives of the Center for Applied Linguistics in Washington - Dr. W. Nemser and, as a consultant for 1970, Prof. F. Agard from Cornell University).

- The working group on phonetics (dr. docent A. Avram and co-workers).

- The working group for studies in grammatical structure (prof. dr. docent Em. Vasiliu and co-workers).

- The working group for studies at the lexical level (prof. dr. I. Coteanu, conf. dr. E. Iarovici, and co-workers).

- The working group for psycholinguistic experimentation (prof. dr. docent T. Slama-Cazacu and co-workers).

- The working group for establishing the hierarchical system of errors of Romanian learners of English (conf. dr. D. Chiţoran and prof. dr. docent T. Slama-Cazacu, and co-workers).

3. Prof. R. Filipović notes one aspect basic to research of this type (more so than for other research activity), when he states: "The first problem facing the researchers engaged in the Serbo-Croatian Contrastive Analysis Project was that of the method" (R. Filipović, The choice of the corpus for a contrastive analysis of Serbo-Croatian and English, in the Yugoslav Serbo-Croatian - English Contrastive Project, B. Studies, 1, Zagreb, 1969, p. 37). But there can be no doubt that problems of method are closely linked to the theoretical solution of some problems of principle. We feel this need even more strongly, in light of the fact that contrastive linguistics does not yet constitute a systematic theory, with a subsequent clear and validated methodology. This is why methodological discussions relating to the rationale were regarded as particularly important for the commencement of the present project.

3.1. Consequently, the Project is primarily characterized by a preoccupation with basing the research itself on a clear, modern, and appropriate theoretical conception. That is why the first stage of

our activity has consisted mostly in the elaboration of certain theoretical and methodological principles.

Both a theoretical and a pragmatic consideration determined the decision concerning the general outline of our project:

a) A desire to advance toward a unified theory of contrastive linguistics in keeping with the modern development of present-day sciences, and avoiding the shortcomings of "traditional" contrastive analysis.

b) A wish to satisfy the immediate project requirements: facilitation of the teaching of English to Romanians and then of Romanian to English speakers, by finding adequate procedures, requiring a reasonable amount of time and an economical research strategy, the results of which should not only be truly efficient in every-day teaching practice but also easily employed by language-teachers not necessarily equipped with sophisticated knowledge of one or another modern linguistic theory.

3.2. In essence, it was decided that the data obtained by "classic" contrastive analysis (the comparative linguistic description of the two systems, with the pointing indication of the differences predicted as sources of difficulties in learning English) should be corroborated by data obtained in objective-systematic research (observation and experimentation), leading first to the location of the "sensitive points" of the contact between Romanian and English in the learner. Hence, research plans envisage the coordination of the inductive and deductive procedures of error analysis and of "traditional" contrastive analysis. Consequently, predictions are immediately validated by the processing of data.

3.2.1. "Sensitive points" of contact between English and Romanian, in the direction of English, are being identified in the learner,

on a less impressionistic and subjective basis, through systematic observation and experimentation. This will lead in turn to the establishment of a "hierarchical system of errors", on the basis of several procedures (dictees, compositions, sentence completion techniques, dialogue recordings etc.), administered to a large number of learners, yielding data which will be statistically processed, and will enable us to ascertain which errors are the most frequent and important (from the point of view of communication). The hypothesis is advanced that this method will also reveal not only errors which are due to the contact of the two languages in the learner, but also errors due to other determinants (such as errors of generalization). It is this very fact that constitutes another proof of the utility of coordinating the two general procedures - what is generally termed "error analysis", actually taking into account the learner's behaviour from the very beginning, and the comparative confrontation of the two systems in abstracto. The research will especially focus on the explanation of errors, and not a priori prediction, on a strictly deductive basis.

The in-depth study will follow, utilising contrastive analytic techniques, linguistic observation and experimentation (at the phonetic level for example, etc.), and psycholinguistic experimentation.

3.2.2. As for the linguistic model on which the in abstracto linguistic analysis is to be based, the conclusion has been reached that it is more useful to adopt a pragmatic approach in making the evaluation and selection. Therefore we propose, during this part of the research, to seek not the establishment of "universals" of language, but a rigorous comparative analysis of English and Romanian; on the other hand, we do not envisage an exhaustive analysis in confronting language facts. At the same time the choice of any modern theory is difficult, since none of them has been proved to be "the best". Therefore we have to concede

that it will be necessary to find new solutions, in a type of pioneering work that should not, however, be oversimplified. The starting point will probably be - as F. Agard has suggested - the underlying structures, in their relations with the "surface structures" ("lexial insertion" constituting the crux in this distinction). The corpus for analysis will consist of a vocabulary of several thousand English items scientifically selected (on the basis of frequency).

These lexical items will be analyzed from the point of view of their multiple meanings and the grammatical constructions in which they occur, thus arriving at the grammar that operates with this word inventory. On the basis of meaning and structure equvalencies between the languages, a similar grammar of the corresponding Romanian lexical items will be described, thus disclosing the similarities and differences between the two languages.

In describing the grammatical structure of the equivalent Romanian words, note will be taken of their frequency, distribution, and communication value.

The possible shortcomings of a corpus formed of examples drawn from dictionaries, i.e. its questionable value as a reflection of the reality of communication, will be compensated for by corroborating the results of this procedure through the others directly based on the communication situation, hence on the learner.

3.2.3. A main part of the research will also consist in linguistic and psycholinguistic observation and experimentation.

Linguistic observations and experimentation will be concerned with, for instance, the comparative acoustic analysis of items from both languages, the study of intonational parameters, etc. In some of this research work a combined interdisciplinary approach - linguistic as well as psycholinguistic - will be used.

Psycholinguistic experimentation will aim at expanding the data obtained through error analysis, as well as those obtained through linguistic analyses. A number of psycholinguistic experiments will concern various problems of learning which we discussed in a separate paper.

4. Since the Project as a whole is in its first stages, we cannot of course report numerous and definite results. Similarly, the various working groups have not all reached the same stage of development in their initial research activities.

4.1. Let me mention, among the first results of our activity, two already published articles, dealing with theoretical and methodological problems. In one, the various linguistic models that could serve in a contrastive analysis project are discussed: D. Chitoran, Analiza contrastivă şi procesul de predare si învăţare a limbilor străine ("Contrastive analysis and the process of foreign-language teaching and learning"), "Studii si cercetări lingvistice", 1970, nr. 2, pp. 241-248. The other article is a critical discussion of traditional contrastive linguistics. It suggests a new systematization of theory and analytic procedures, based on a psycholinguistic approach - "contact analysis" (this conception also underlies, to a great extent, the theoretical and methodological orientation of the present project): W. Nemser and T. Slama-Cazacu, A contribution to contrastive linguistics (A psycholinguistic approach: contact analysis), "Revue roumaine de linguistique", 1970, no. 2, pp. 101-128.

4.2. Extensive research, to establish the hierarchical systems of errors, was begun as early as the autumn of 1969, with the analysis of the results of the admission examination at the English Department of the University. This first investigation had a preliminary character, its role being to orient the research, and at the same time to disclose

certain learning problems, as well as to introduce young staff members of the English Department to the research activity. Later on, in December 1969, 100 students from the English Department as well as a large group of people attending English courses at the "People's University" were used as subjects in an investigation attempting to identify the major error types of Romanians learning English, at various acquisition levels. The task of these subjects consisted in a narration following presentation of a sequence of images structured in such a way as to direct the students towards the use of certain specific forms. The data is currently being processed on the basis of a system of errors suggested by F. Agard. Highly interesting results are already evident.

4.3. A working group (T. Slama-Cazacu, D. Chitoran, V. Stefanescu-Drăgănești) has established as one of the research topics the study of certain intonational characteristics of Romanian speakers of English. This research combines procedures of psycholinguistic experimentation (recording of free dialogue in both languages, between speakers at various levels of knowledge of English) and of linguistic analysis.

4.4. Other working groups are undertaking research in such fields as experimental phonetics (A. Avram and co-workers).

The group dealing with lexical problems (E. Iarovici and co-workers) are using Michael West's "General Service List of English Words" (London 1959). Each item is copied, and then the Romanian equivalents are found. Examples are completed or replaeed when necessary, for contrastive analysis. In addition, each item is analyzed and classified from the point of view of form, meaning, distribution, connotation, etc. E. Iarovici and R. Mihăilă have reported on this research in an article: Introduction to a contrastive analysis of the

English and Romanian vocabularies, to be published in "Analele Universităţii Bucureşti" (in 1971).

4.5. Part of the activity also consisted in planning discussions by the various working groups and by the administrative team.

Similarly, preparatory reports have been presented in a working group organized at the Department of Modern Romanian (F. Agard, D. Chitoran, L. Levitchi, C. Mirza, Em. Vasiliu). Complete bibliographies for the various teams have been compiled.

State diploma and doctoral thesis studies have been started, dealing with topics in the contrastive analysis of Romanian and English or with problems of general contrastive linguistic methodology (under the guidance of conf. dr. D. Chitoran, conf. dr. L. Levitchi, prof. dr. docent T. Slama-Cazacu).

Frederick Agard, professor at Cornell University, who worked as consulting specialist for the project, representing the American staff of the project, offered a course on contrastive analysis at Bucharest University (February-May, 1970), which has been made available in mimeographed form.

NOTE

1. This report was written by T. Slama-Cazacu in collaboration with members of the staff of the English Department of the University of Bucharest, largely on the basis of agreements and reports concerning various stages of the project.

DISCUSSION was opened by the Chairman, Dr. László Dezso (Budapest)

M. Vlatković: I have a minor point in paragraph 3.2. and you have also mentioned it now. You have chosen, among other things, dictées, dictations, for your error analysis. First of all, what were the reasons for your choice of dictations? Do you want to check spelling or general comprehension or what? And number two, how were they actually carried out? Did you have a number of people dictate, because in this case I do not think that an objective dictation could have been carried out, or did you have a tape recorder to ensure exact time limit and exact speed and the same pronunciation?

T. Slama-Cazacu: Yes, why dictées? I have experience from summer courses at Sinaia with speakers of different languages learning Romanian. In giving such dictées contrastively interesting things appear. From the practical point of view it is interesting to compare the possibilities in perception, because of course learning a language also means perceiving. And this has to be kept in mind when we are teaching a language. Why not also include in contrastive studies this problem of perception and what the learner's possibilities of differentiating are - learners having their own basic systems, Romanian for instance, learning French compared with English? The methodology used in the summer courses was the following: giving all the foreign learners from beginners to the most approximate to Romanian, the same dictée recorded on the tape-recorder in an experimental situation well controlled, the same voice, the same speed and so on. And interesting results appeared and that made me suggest that such dictées should also be given for this English-Romanian contrastive project.

R. Filipović: I am further interested in the corpus. Have you already decided upon the corpus? In paragraph 3.2.2. you say "The corpus for analysis will consist of scientifically (on the basis of frequency) selected vocabulary of several thousand English items". Could you tell us something more about this? And then the second paragraph that follows: "These lexical items will be analysed from the point of view of their multiple meanings and the grammatical constructions in which they are distributed, thus achieving a grammar that operates with this word inventory". Does this mean that you would get your words from a dictionary? Would the dictionary explanation of a word be taken as material for the corpus? And when you translate your corpus into Romanian, will you then get a two-way corpus in this way, i.e. English and Romanian and Romanian and English, or just Romanian and English?

T. Slama-Cazacu: As I told you, many parts of this mimeographed paper pertain to protocols, and this pertained to the protocol of a meeting with Prof. Agard. And I wanted to be objective; I quoted this formulation of Prof. Agard as it was adopted by us. Maybe my colleague Chiţoran will explain more about this problem. I do not want to be unfair here, but it is not my idea and I do not entirely subscribe to such a corpus.

D. Chiţoran: Yes, I'll try. It is indeed a corpus, namely selected vocabulary from a dictionary. We had in mind Michael West's "General Service List of English Words". For the lexical level it is exactly what is written here that is going to be done, there will be a study of the forms, functions and meanings of these items. Then there will be a grammar of only these items for English and a similar grammar of the corresponding Romanian items. And

the two grammars will be compared. I think it was the greatest gain that we decided upon this since it limits the size of the analysis to the bare minimum which we believe to be necessary for a contrastive analysis which will lay foundations for teaching at least at the initial level. This will also be required because of the amount of the time that we are going to spend on the error analysis and the establishment of the hierarchical system of errors. It is not going to be final, evidently, it will have to be extended later on, but as it is now, there will be a grammar of - just to give an example - say there are only eighty adverbs in the list, there will be a grammar of those and not the rest.

M. Mikeš: I would like to say something about these probes. As far as I understand what is going on in the Romanian project in connection with probes, they are so-called broad-spectrum probes, which means that the answers you get will open a quantity of problems, and these problems are then discussed linguistically and theoretically. And now the linguistic theory helps us to do another kind of probes which are so constructed that there is a possibility of only one or two answers for each item and then we get the result that such and such a group of informants give such and such answers. So I suggest to you that after this broad-spectrum test you do a very thorough linguistic analysis, then another kind of tests with only two possibilities for an item, and then out of this comes a summing up of the probe.

T. Slama-Cazacu: We thought of such probes. The problem is only, where should we stop? Starting is easy, but where to stop? Because if we begin to give such probes for details we do not stop anywhere.

M. Mikeš: You can stop because you first work theoretically, you get a quantity of questions that you have to discuss just from the linguistic point

of view, and then you get what is interesting, and then you choose...

R. Filipović: A question on paragraph 4.2. I would be very interested in hearing a little more about how this experiment with pictures and narration will be or has been done. I believe that it is a wonderful idea to have what I call "a guided narration". But my experience with pictures has been very bad in the past. How did you organize the guided narration?

T. Slama-Cazacu: The pictures are given to the students in a sequence, they are sheets of paper, of course xeroxed, and as little as possible is explained in order not to guide the subjects to anything. It is just recommended that they should use past tense and the dialogue or narrative form, all the forms they would like, but especially dialogue and narrative. I would ask you, what were the dangers and what were the wrong results of your experiments, of this type of experiments?

R. Filipović: I was referring to wall pictures which cannot be used without some kind of guiding patterns. In teaching we limit the use of pictures to some special exercises. I did not know whether you used wall pictures or pictures specially designed for some experiments.

T. Slama-Cazacu: In the beginning we meant to have such specialized pictures for each topic, or for each problem, a sequence of images and a composition for each. But, I also ask Dr. Mikeš, where should we stop with such probes? Now the intention is just to elicit, to provoke a composition of forty lines; the subjects are asked to write forty or up to fifty lines, in fifty minutes, and they are free to express themselves in any way they want except that they have to use the past tense. For the moment we have the probes

of the last year already corrected and there appeared many of the errors we presumed we would have.

R. Filipović: Is that only written or also oral?

T. Slama-Cazacu: This is written.

R. Filipović: There is no oral test?

T. Slama-Cazacu: There will be. But this is the first on a large scale. Now it is being repeated with about four hundred students and some of them already had the probe last year. We'd also like to compare it with the former performance in the psychological sense, the performance of this composition. You would say that many errors, many answers to linguistic problems, linguistic presuppositions, will not be given with such probes. The learners may try a compensatory way of expressing just because they do not know some form. This is the reality and this will appear in the interpretation of the data afterwards, from the qualitative point of view besides the statistical. But this is completed as I told you with dictées, with free composition, with exercises in which they complete some text, and with oral recordings.

R. Filipović: Would Dr. Bujas try to answer Dr. Slama-Cazacu's question whether it is possible to use the computer for tabulating errors?

Ž. Bujas: You can use a computer for everything if you have your data in a computer-processable form, if you are ready to pay for it, if you are ready to slave in order to get the material into a form which a computer can process. But the tabulation of coded or linguistically interpreted texts for a computer is really no problem.

T. Slama-Cazacu: For a test that would imply one, the best interpretation, I think for a dictée. But when a free composition is involved?

Ž. Bujas: Then it's up to you to devise a scale let's say of five levels of mistakes, of straying away from the usual. It's only up to you. Shall I use the Hallidayan word "degree of delicacy"? You can devise, let's say, fifteen levels depending on how much our testee strays from what you call the central, usual level. And after that, it is just a trivial matter of tabulation. You do not need a computer for that. Any limited mechanical, what we call mechanographic, system can do that. And this can be found all over Romania I am sure. Anything in the form of punch cards which are simply sorted on a sorter and then printed out on a printer which is called a tabulator, - by now I am afraid antiquated, but it's cheap and it can still be found lying around. If you are lucky a large company can even make a donation to your institute, because by now they are largely replaced by electronic equipment, they are slow and mechanical. And then you can use your little machine clacking away happily and do your stuff in say eight weeks instead of two weeks.

The Chairman closed the discussion.

R. Filipović (Zagreb, Yugoslavia)

SUMMING UP

The papers that we have heard can be divided into two groups: those that were reporting about particular projects and those that discussed theoretical problems of contrastive studies.

I believe we all agree that both types of papers contributed to the success of the Conference.

In the discussion following the papers there were several recurrent themes:

1) The use of a corpus in contrastive analysis is not a theory and does not aim to replace theory. The material from the corpus serves as a check on theoretically-based conclusions and as a source of data in areas where the theory is inadequate.

2) Various opinions were expressed on the role of theory in contrastive analysis. Generative-transformational linguistics has been shown to yield important insights in certain areas. But in others it does not seem applicable in its present state of development and the Yugoslav project has in fact used a rather mild version of contemporary structuralism.

3) Another question is that of the relative roles of linguistic theory and empirical investigation of the learning process.

Both the Yugoslav and the PAKS projects have begun to devote more attention to error analysis, and we have heard from Prof. Slama-Cazacu a detailed psychological justification of work along these lines.

4) A question which has not been discussed very much but which has been, as it were, in the air all through our Conference is the question of the practical application of the results of contrastive analysis. Some

projects have by force of circumstances been aimed more at rapid production of practical results; while others have been keeping in view theoretical advancement as well as practical.

5) Two more questions the Conference has discussed at length are approximative systems and error analysis. Both questions require more investigation and we hope that projects will contribute to these two questions in the course of their work.

In the discussion that followed, there was general agreement that it is desirable to hold conferences of contrastive projects once a year. J. Fisiak suggested that one center should agree to keep a bibliography of unpublished contrastive work, such as internal reports, theses, or conference papers. Several speakers supported this idea in principle, but stressed the need for exchanges of materials between each two projects. R. Phillipson noted that results of contrastive projects should be shared with other researchers on English linguistics.

In connection with the time and place for the next conference, it was concluded that the Romanian project would investigate the possibilities for holding it in Bucharest in November 1971.

R. Filipović, as organizer of the present conference, expressed his satisfaction with its work and his gratitude to the participants and all others who made it possible, and J. Fisiak in the name of all the foreign participants, thanked their Yugoslav hosts for the warm welcome they had been given.

THE YUGOSLAV SERBO-CROATIAN - ENGLISH CONTRASTIVE PROJECT

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